Market Orientation Capabilities: A Study of Learning Processes in Market-oriented Companies

Ragnhild Silkoset

2009-10-02

Published at VDM-Verlag
ISBN: 978-3-639-04429-4

Contents

Chapter 1. Introduction

The idea that the development of products and marketing initiatives are most effective when based on customer needs and preferences is perceived today as a natural and necessary part of any firm's strategic orientation. Among the various strategic orientations, however, market orientation has been considered superior in terms of its ability to produce products that meet customer preference. This is due to the fact that market orientation is in principle an intelligence system (Kohli and Jaworski 1990; Narver and Slater 1990; Ruekert 1992; Deshpande, Farley and Webster 1993).

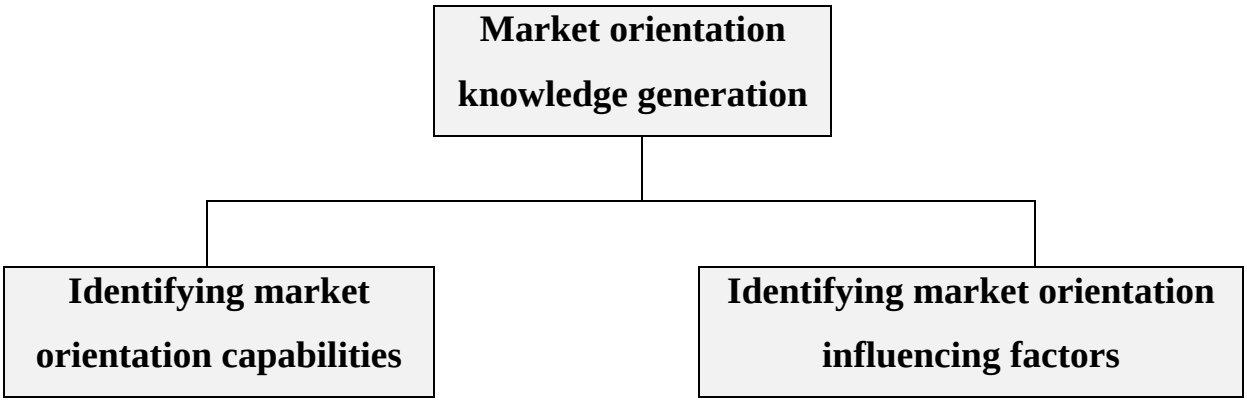
Focus on market orientation research has largely been threefold. The content of the concept of market orientation has been to the object of many studies, and researchers have offered a number of proposals (e.g. see Kohli and Jaworski 1990; Narver and Slater 1990, Deshpande, Farley and Webster 1993, Shapiro 1998 and Hunt and Morgan 1995). Secondly, studies have been done on the effects of market orientation with a focus primarily on profitability or product innovation (see Kohli and Jaworski 1990, Narver and Slater 1990, Slater and Narver 1994, Jaworski and Kohli 1993, Ruekert 1992, Pelham 1999, Greenley 1995; Grinstein 2008; Zhou, Li, Zhou and Su 2008; Morgan and Berthon 2009). The third area of research has assessed the causes of market orientation. Here the focus has largely been on investigating the conditions that must be present for the practical implementation of the market orientation intelligence activities (see Kohli and Jaworski 1990; Narver and Slater 1990; Hunt and Morgan 1995; Deshpande, Farley and Webster 1993, Ruekert 1992, Jaworski and Kohli 1993, Slater and Narver 1994; Selnes, Jaworski and Kohli 1996).

As early as 1992 the Marketing Science Institute encouraged researchers to focus on how companies can …*instill and foster a learning orientation and better retain and store managerial knowledge*. Sinkula (1994) emphasizes the importance of research on learning in market orientation, among other areas on the mental models, knowledge, memory, and how the shared values affect behavior. He points out, however, the necessity of including the interpretation of information as a part of market learning because this, he argues, is difficult. Slater and Narver (1995) point out the necessity of additional contributions by researchers to market-oriented learning, and Hunt and Morgan (1995) reveal that the causes of market orientation in the learning perspective requires further research. Powpaka (1998) points out the need to look at several factors that affect willingness of employees to implement a market orientation including values, attitudes, and motivation. Adams, Day and Dougherty (1998) indicate the importance of investigating learning as a *process*. This is in line with Hurley and Hult (1998) who emphasize the importance of examining the processes rather than merely activities in order to produce the combination of capabilities within market orientation and learning. The latter describe the need to look at conditions in which ... *a process approach and examining how firms innovate and develop new capabilities to compete, along with the role of learning and market orientation in the process, should enhance our understanding of how firms learn, change and perform* (Hurley and Hult 1998: 52). Based on the foregoing, this book develops the following research questions:

Which factors affect the market-oriented companies' generation of knowledge?

These factors are thought to differ from other knowledge-based businesses through the direct and expressed focus that market-oriented businesses have on the importance of *market* information. To answer the question initially, two themes will be investigated. The first theme will be to identify the learning process within market oriented companies, e.g. the three market orientation

capabilities. The second theme will be to identify factors that influence the companies' ability to carry out the micro-processes of market orientation learning.



1.1 Contribution

There is a consensus among researchers that market orientation provides companies with a competitive advantage over their competitors through the superior market knowledge generated by market orientation. However, research reported diverse findings with regard to the effects of market orientation (Narver and Slater 1990; Ruekert 1992; Davis and Schul 1993; Deshpande, Farley and Webster 1993, Jaworski and Kohli 1993, Slater and Narver 1994; Greenley 1995; Atuahene-Gima 1996; Selnes, Jaworski and Kohli 1996; Hurley and Hult 1998; Li and Calantone 1998; Siguaw, Simpson and Baker 1998; Pelham 1999). The reason for these differences may be that the understanding of market orientation varies in the research literature, resulting, therefore, in a different effect variable.

Intelligence processing in the market-oriented businesses produces market knowledge, and market orientation can thereby be considered a system for market learning. Kohli and Jaworski (1990) implicitly identify market orientation as a market learning process since the collection and sharing of intelligence are the main processes in organizational learning. Slater and Narver

(1995) argue that market orientation in combination with a culture of learning produces superior market knowledge, and Sinkula, Barker and Nordewier (1997) investigate the learning processes in companies in terms of their ability to fulfill market orientation activities.

Despite the focus on market-oriented companies' superior ability to develop unique market knowledge, few studies have examined how information processing in the market-oriented companies transforms intelligence into knowledge. Studies focusing on intelligence processing in businesses include Agyris and Schön (1978), Daft and Weick (1984), Hunt (1991), Sinkula (1994), Day (1994a), Hult and Ferrell (1997), Sinkula, Barker and Nordewier (1997) and Hurley and Hult (1998). This focus on information processing entails that data is seen as a source of knowledge affecting the firm’s decision-making as related to customer services. Thus, the goal for information processing is to develop knowledge, rather than merely to provide as much information as possible.

A focus on market orientation from a learning perspective will reveal how the market-oriented firms utilize the information collected as a source for knowledge development. The focus on market orientation as a source of knowledge is both important and necessary as it allows us to detect determinants that promote knowledge development on the basis of market information. This in turn facilitates the learning process in the organization and thus makes it more efficient. While previous investigation of the causes of market orientation has been aimed at finding factors for functional conditions in order to make as much information as possible available for processing, this book’s focus on knowledge generation seeks rather to identify drivers that promote the ability to generate deeper and better knowledge from the market orientation activities.

1.2 The structure of the book

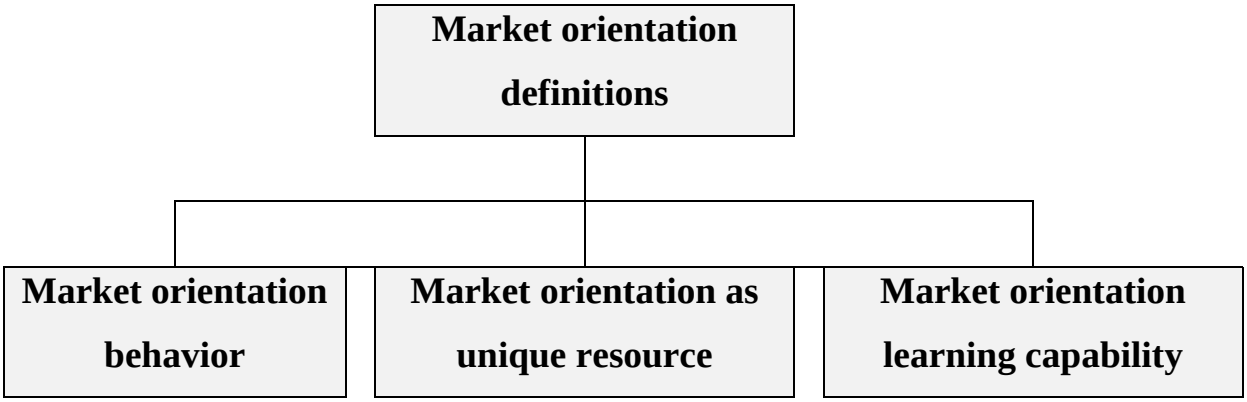
The literature operates with three perspectives on market orientation. These include market orientation as behavior (Kohli and Jaworski 1990; Narver and Slater 1990), market orientation as a unique resource (Hunt and Morgan 1995) and market orientation as a dynamic learning capability (Sinkula 1994; Day 1994b). A company's level of market orientation will vary with regard to the perspectives, including factors affecting a company’s degree of market orientation and the effects of market orientation. Chapter 2 investigates these subjects. After investigating the different aspects of market orientation and after looking at variations in the factors affecting the level of market orientation, Chapter 3 will investigate factors that influence the market-oriented firm’s intelligence processing for the generation of knowledge. Through the establishment of measures for market orientation capabilities, I will identify determinants that affect knowledge generation in the area of market orientation (see Sinkula, Barker and Nordewier 1997; Day 1994a). Chapter 4 explains the method used to analyze the research model, and the validation of the measures, while Chapter 5 reports the results of the analysis. Chapter 6 describes the conclusions from the project, and offers suggestions for future research.

Chapter 2. Definitions of market orientation

The purpose of this book is to investigate the process in which the market-oriented firms generate market knowledge. To answer this question I will start with a clarification of why the fulfillment of market orientation varies from company to company. This is believed to be caused by two factors. Firstly, it may result from the way market orientation is defined. This will be accounted for in the first part of the chapter. Secondly, the variation in the level of market knowledge may be due to company characteristics. Learning within the organization will be discussed in the second section of this chapter.

2.1 Three definitions of market orientation

The purpose of this chapter is to clarify what the different perspectives on market orientation imply regarding the focus, content and understanding of market orientation. The chapter will start with an introduction from three different market orientation perspectives: (1) market orientation as a behavior, (2) market orientation as a unique resource, and (3) market orientation as learning capability, and will then analyze the differences and similarities between the perspectives. The analysis will begin with a review of market orientation as a behavior. This section will conclude with a summary of how the explanatory power varies between the different market orientation perspectives.



Perspective 1: Market orientation as a behavior

The roots of market orientation started with an increased understanding of customers' importance regarding to companies existence. Through this, market orientation was considered to be a core concept in marketing (Drucker 1954).

There is only one valid definition of business purpose: to create a customer… It is the customer who determines what the business is… Because it is its purpose to create a customer, any business enterprise has two – and only these two – basic functions: marketing and innovation
- Peter F. Drucker, The Practice of Management

The importance of including the entire organization when building customer value was developed in the early 50 century. Hence, the term *'market orientation'* clearly stood out from the existing term *'marketing orientation'*. The latter concept included a discussion about how the 4 P's (Product, Place, Price, and Promotion) should be managed to meet customer needs, while the former, market orientation, focuses on the company's shared intention and responsibility to build customer value (Kohli and Jaworski 1990; Narver and Slater 1990, Jaworski and Kohli 1993).

This first emphasis regarding the importance of organization-wide effort to build customer value focused at market orientation as part of the more fundamental and pervasive culture of the organization. Culture is here seen as patterns of shared values and assumptions that provide meaning among the members of the organization, and which puts forward rules for behavior (Deshpandé and Webster 1989; Deshpandé and Farley 2004). This *'market concept'* may be considered as a philosophy of how to conduct business operations as the central ingredient in a successful organization's culture, hereof a culture that should be built around a customer focus regarding the organization's values …*in other words, the marketing concept defines a distinct organizational culture…that put (s) the customer in the center of the firm's thinking about strategy and operations* (Deshpandé and Webster 1989: 3). Therefore, Deshpandé and Webster's (1989) focus on the organization culture pinpoints towards a customer's orientation.

In the development of the 'market orientation concept' the focus turned toward including both customers and competitors (Narver and Slater 1990). Narver and Slater (1990) focuses on the market orientation concept, although they added a balance between the customer's, competitor's and internal organizational focus, in addition to having two dimensions of decision-making, profitability and long-term, as part of the concept. Their definition is:

"…market orientation consist of three behavioral components – customer orientation, competitor orientation, and interfunctionally coordination – and two decision criteria – long term focus and profitability" (Narver and Slater 1990: 21).

Narver and Slater (1990) define an absence of the cultural values to weaken the activity pattern of behavioral mindset which supports a market orientation. Later on Slater and Narver (1994) omitted the two effects of market orientation,

decision-making dimensions and long-term profitability, as part of the definition (being a change from the means-end definition to a means definition, see Venkatraman 1989). Slater and Narver (1995) stated that they will follow the practice of Shapiro (1988). Shapiro (1988) defines market orientation to build on the three behavioral elements as the content in the concept of market orientation. These elements are (i) intelligence on all important buying influences pervades every corporate function; (ii) strategic and tactical decisions are made interfunctionally and interdivisionally; and (iii) divisions and functions make well-coordinated decisions and execute them with a certain sense of commitment.

The literature distinguishes between the philosophy of market orientation and the implementation of the philosophy. The former is described through the above 'market orientation concept', and can be regarded as consensus about which activities to implement. Here are Narver and Slater (1990) as an example, by stating that the ability to be market-oriented will be a function of the philosophical attitude of the employees regarding their emphasis on customer orientation, competitor orientation and inter-functional coordination. Differing, a focus at market orientation from the implementation viewpoint rejects this view, by looking at market orientation as the implementation of the market orientation concept, i.e. the implementation of the behavior activities. For example, Kohli and Jaworski (1990) consider the ability to be market oriented to depend on the practical implementation of the behavior activities: intelligence gathering, intelligence dissemination and response to the intelligence. Common to both of these two views are, a general consensus that the intelligence activity is of great importance, and both emphasis the importance of the behavior in order to achieve the market orientation activities. However, the authors have different opinion regarding what is driving the intelligence process; Narver and Slater (1990) focuses on the attitude of the activities and Kohli and Jaworski (1990) focusing on the activity's implementation. They both agree on behavior as the

basis of the market orientation activities, meaning that these two contributions are labeled under the same perspective, the behavioral perspective.

The behavioral idea of market orientation as the conduct of activities is captured by the definition of market orientation concept in line with Kohli and Jaworski (1990), who defines market orientation to be:

”Market orientation is the organizationwide *generation* of market intelligence pertaining to current and future customer needs, *dissemination* of the intelligence across departments, and organizationwide *responsiveness* to it " (Kohli and Jaworski 1990: 6, original authors' italics).

Each element describes the various activities relating to the collection and response to intelligence about customer needs and the impact of technology, competition and other external forces. It is interesting to note how Kohli and Jaworski (1990) consistently uses the term 'intelligence' and avoids the word 'information'. With this they have an implicit assumption that the company already has an understanding of what information is important and relevant.

The intelligence should be obtained from both current and future customers with current and potential competitors, and from environmental factors that may affect the organization. Moreover, it is important that the intelligence gathering is the responsibility of all employees throughout the organization, not just the marketing department. The definition also implies that the intelligence is included into the strategic plans and the behavior in relation to the intelligence.

In summary, the behavioral mindset on market orientation support the view that market orientation consists of activities, while the definitions vary according to whether it focus on the attitude and motivation to carry out the activities (Narver and Slater 1990), or whether it is the ability to implement activities that the

market orientation concept (Kohli and Jaworski 1990). Together, both form a behavioral perspective on market orientation.

Perspective 2: Market orientation as an unique resource

After focusing on the market orientation from a behavioral point of view, the development of the concept has gone into the direction of considering market orientation as a source of knowledge on how to better utilize resources in relation to market developments. Varadarajan (1999: 134) emphasizes the importance of distinguishing between market orientation activities and culture against the role of market orientation as a source of superior competitive advantage. To be a competitive advantage a resource must lead to an 'above normal return on resources' either through higher income or lower costs (Hunt and Morgan 1995: 5). As a consequence of this perspective on market orientation, a number of researchers looked at the link between market orientation and the increased ability to make rational decisions about combinations of its use of resources (see Cooper 1994; Atuahene-Gima 1995). For example, Cooper (1994) found that market orientation has a significant effect on a company's ability to innovate. The effect was increased both on the company's degree of product successes as well as the time it took to launch the product into the market. In other words, this shows that market orientation provides knowledge about the ability for efficient resource utilization.

The resource perspective on market orientation has evolved further, and after a period of focus on market orientation as a source to exploit internal resources efficiently, the focus developed into looking at *why* the resources leads to greater innovation and profitability. Morgan, Vorhies and Mason (2009: 909), relate market orientation to …*capabilities through which resources are deployed into the marketplace as drivers of firm performance*. Hunt and Morgan (1995) perceive market orientation to be a unique resource by itself and by

demonstrating that companies who hold the ability to effectively use the 'resources' of market orientation is likely to achieve a *position of sustainable competitive advantage and superior long-run financial performance* (Hunt and Morgan 1995: 13). Their explicit definition of market orientation reads:

…it is not the same thing as, nor a different form of, nor the implementation of, the marketing concept. Rather, it would seem that a market orientation should be conceptualized as supplementary to the marketing concept. Specifically, … we propose that a market orientation is (1) the systematic gathering of information on customers and competitors, both present and potential, (2) the systematic analysis of the information for the purpose of developing market knowledge, and (3) the systematic use of such knowledge to guide strategy recognition, understanding, creation, selection, implementation, and modification (Hunt and Morgan 1995: 1).

Thereby, market orientation is used as a source to gain competitive advantage by linking it to the unique resources which it creates. This definition of market orientation differs from both 'the marketing concept' and 'marketing orientation' through what it brings (a focus on current customers and potential customers, and competitors as well as customers), and exclude the inter-functional coordination as part of the definition (see Narver and Slater 1990) by arguing that the reason for a concept do not need to be part of the concept. With other words, Hunt and Morgan's (1995) strategic emphasis on market orientation does not consider the intelligence activity processes but, rather, the desire to be able to predict the consequences of what the process entails – e.g. which resources it develops. They focus on how scarce resources can best be utilized in a given market and how market orientation in itself leads to unique resources, which can be exploited as a superior competitive advantage in the marketplace (Hunt and Morgan 1995). Thus the internal process that creates this ability is taken for

granted. Menguc and Auh (2006) based their research on market orientation to the resource based view of the company, and found that by taking an internal approach by focusing on …*existing stocks of resources within the firm while controlling for environmental conditions they explained how market orientation can be transformed into dynamic capability when complemented by transformational (reconfiguration) constructs, such as innovativeness* (Menguc and Auh 2006: 63). They found that company's performance is strengthened when market orientation is bundled together with internal complementary resources, such as innovativeness.

Innovation was also the subject of a study of Atuahene-Gima (1995) who investigated the relationship between market orientation and product innovations. He found that market orientation was a factor in the success of new products, and greatest when the products represented an incremental change for both consumers and business. His study was based on the market orientation scale of Ruekert (1992). The conclusion of Atuahene-Gima's study is that the market orientation effect varies, and one must therefore adapt the degree of market orientation with the company's innovation strategy (small effect of the market orientation when the environment are friendly and the products is at a late stage in the product life cycles), and with the environment and the degree of news on innovation. The definition of market orientation here believes that market orientation consists of various degrees and that the degree varies with the degree of required innovation.

Perspective 3: Market orientation as a learning capability

After focusing on the market orientation's ability to create strategic opportunities through the development of resources and how the knowledge enable organizations to utilize these resources in the market, the development went on to focus on the execution of the process that creates the market knowledge. The

organizational learning processes led to an increased understanding of the importance and the utilization of market orientation (Sinkula, Barker and Nordewier 1997). This process to develop of market perception follows the usual sequence of intelligence systematization activities that organizations use for learning (Levitt and March 1988, Huber 1991; Sinkula 1994; Day 1994a, Kyriakopoulos and Moorman 2004). The intelligence systematization activities imply that information must be sorted, classified, simplified, and interpreted to form congruent patterns. In other words, a focus on the cognitive knowledge creation is used to understand why market knowledge is established and developed (Huber 1991). A relationship which strengthens the explanatory power of this perspective is the inclusion of the explanation of how interpretation is affected by mental models (McCelland 1985; Day 1994b; Sinkula, Barker and Nordewier 1997). Day (1994b) demonstrates how mental models guide the direction of learning, because the mental models help to filter out the information's importance and relevance.

Day (1991) was one of the earliest researchers who related learning to competitive advantage. As the starting point, he found that those organizations that have great knowledge of their market was in a better position to respond proactively to changes, and had an increased ability to anticipate market reactions in the form of rival attacks or customer attractiveness, in addition to the ability to interpret the shifts and trends as well as increased identification and verification of the changes which led to a mobilization amongst the employees to seize opportunities that come to light. This understanding of market orientation is on how businesses develop distinctive capabilities and the extent to which these capabilities can be further developed and maintained. McKee (1992) linked the learning to product innovation by focusing on how a company was 'learning to innovate'. The trend goes toward a greater focus and awareness of customers' value, and thereby how the knowledge creates as a result of how market-oriented companies builds superior long-lasting

competitive advantage (Craven, Greenley, Piercy and Slater 1998). Day (1994b) however, shows that the capabilities are diffuse and difficult to verify because of their intangible knowledge dimension.

To summarize, the learning capability perspective has a quest for understanding how the organization processing affects the internal relationships in the organization, and which factors that promote these relationships so that the ability to process the information is safeguarded and developed. Here the content of market orientation is on how the organization, on a self-generating manner, can develop to maintain and improve the implementation of the three market orientation activities (Sinkula, Barker and Nordewier 1997). The implementation of the intelligence activities are seen as a result of the learning process, upon which it is the knowledge development processing that are of interest within in the learning capability perspective.

2.2 The exploratory power of the perspectives

A mapping of the difference in the explanatory power among the perspectives of market orientation will lead us to develop an understanding of the applicability of the perspectives. Such an understanding enables us to include the perspectives in those areas which they are intended. Hereby, the resource perspective should not be used to explain the company's ability to interpret intelligence since the perspective does not include this as part of its explanatory power. Nor is the dynamic learning perspective developed to explain the practical conditions that must be present for the intelligence flow within the organization. This is rather an important part of the explanation of the contents of the behavioral perspective within market orientation.

Previous researchers claim that some companies are more market-oriented than others (Slater and Narver 1994). However, these claims should be related to the

market orientation perspectives they lean on. For instance, the behavioral perspective measures the fulfillment of the intelligence activities. The resource perspective measures the degree of market orientation by looking at how the market knowledge is a source to develop the company's ability to combine its resources, while the learning perspective measures the degree of market orientation by looking at the advancement in ability to create knowledge.

Therefore, it is necessary to be precise when one determines what the perspectives are supposed to explain in order to relate them to those processes they intend to explain. Troye (1994) has developed eight sets of scientific-theoretical criteria to account for the explanatory power of theories and constructs. This is the objectivity, explanatory power, empirical support, falsification, precision, systematic structure, breadth and generality, and the applicability and usefulness of theories and constructs. A selection of these criteria will be used to map the variation in the explanatory power of the market orientation perspectives.

Among the eight criteria for evaluating theories and constructs that Troye (1994) has developed, this project will emphasize the criterion 1; objectivity, which describes the orientation of denotation of perspectives, i.e. the ability of verifiability. Criterion 2: explanation capabilities, which describe the difference in the phenomenon area that the perspectives seek to explain, as well as criterion 3: empirical support, which describes whether the intention of the content are consistent with reality.

Criteria 1: Objectivity and inter-subjective testability

Objectivity can be linked to the aspects of 'value freedom', and 'assumption freedom', which can be searched achieved through the 'verifiability'. Objectivity is desirable to provide direction to denotation of the theory, i.e. which objects and events that the properties of an object contains (Zaltman, Pinson and

Angelmar 1973: 32). However, one can question whether theories and constructs can be objective when they are all developed from perceptions. One solution is to seek objectivity through intersubjective testing. Therefore, theories and concepts must be designed to enable such intersubjective verification (Hunt 1993).

The behavioral perspective developed by Kohli and Jaworski (1990) and Narver and Slater (1990) were among the earliest attempts to define the nature of the concept of market orientation. Contributions that have verified this perspective empirically include Meziou (1991), Kohli, Jaworski and Kumar (1993), Selnes, Jaworski and Kohli (1996), Slater and Narver (1994), Wrenn (1997), Siguaw, Simpson and Baker (1998) and Pelham (1999). For the second perspective, the resource perspective which was developed by Hunt and Morgan (1995), the verification process is particularly important for the purpose to isolate external factors that affects a company's innovation capability (Hunt and Morgan 1995). Moreover, one can argue that this direction is inflated with the lack of a clear and concise definition of a resource (Barney 1991). Of contributions that have focused on this perspective within the market orientation include Cooper (1994), Atuahene-Gima (1995), Greenley (1995) and Han, Kim and Srivastava (1998). Varadarajan and Jayachandran (1999) points out the necessity to empirically test the role of market orientation as a source of unique competitive advantage. Such empirical testing is difficult for the resource perspective on market orientation, because we lack a consensus of what resources consists of.

For the learning capability perspective of market orientation, the researchers has leaned on an understanding of market orientation based on known, well-tested and accepted theories within organizational learning (Levitt and March 1988, Levinthal and March 1993), and theories within dynamic capabilities (Dickson 1992; Teece, Pisano and Shuen 1997), in combination with the existing market orientation literature (Kohli and Jaworski 1990; Day 1994a; Hult and Ferrell

1997). This combination of the theories does, however, require an effort to verify its content and relation to market orientation. Among studies that have partial combined these theories are Day (1994b) and Sinkula, Barker and Nordewier (1997).

Criteria 2: Explanation

Explanation (the explanandum) can be divided into theory-developing research and applied research. It is the theory-development research that is included in this study. Explanation consists of the elements of singular statements (Explicandum) + law (Explicans) = Explanation (Explanandum). Explanation is primarily used to control the explanation capability of hypotheses being expressed in a theory. The analysis of market orientation is assessed against the various principles' ability to explain its phenomena area. The explanatory models apply to those cases where the market orientations causes or effects are included.

For explanation, the three market orientation perspectives differ. The ekspanandum, the explanation, concerns the difference in the explanatory models or explanation type that is used. Explanatory models can be deductive-homological, deductive-statistical, inductive-statistical, statistic-nomologic or functionalist explanations (Hunt 1991). Explanation types can be functional explanations, causal explanations or intentional explanations. For the three perspectives of market orientation, all three focuses on the explanation of the type of causal relationships through the use of deductive-statistical explanation. In order to assume causal relationship, three criteria must be met. These criteria are isolation, covariation and temporal ordering (Hunt 1991: 84). These criteria for causal inference are discussed in the methodology section in the book.

Explanandum varies between the three market-orientation perspectives. The market orientation behavior perspective seeks to explain the relationships between the ability to perform the intelligence activities and the company's ability to be market oriented (Kohli and Jaworski 1990) while Narver and Slater (1990) explains how the corporate culture affects the ability to conduct the market orientation activities. The behavioral perspective thus explains the intelligence activities feasibility. The 'explanation' within the market orientation resource perspective emphases the relationship between a company's resource possession and the company's ability to create superior competitive advantages. It should however, be mentioned that although this relationship is described by Narver and Slater (1990), their contribution is focused on the importance of the market intelligence. The resource perspective therefore explains why the resource creates strategic capabilities and opportunities. For the learning capability perspective, the explanandum focuses on the relationship between the market orientation capabilities and the market development, that is, there is a 'capacity' to be explained.

For explanation, (what being explained), the statements in the theories affects which laws one seek to explain. Therefore, the statements puts restriction on the validity of theories and the statements varies with the development of the theory. This means that a young theory can cover a far smaller area compared to the validity of a law has been developed for deductive-nomological explanation which enables future generalization (Hunt 1991). The statements restrict what type of explicans that can be used, and the evolution of the law. The market orientation perspectives, in this context, so far apply to the strategic business unit level, although recent research have applied and empirically tested it at the inter-organizational level (Silkoset 2009).

Summary. Explanation in this context assesses whether the different market orientation perspectives explain the phenomenon, rather than its property to

propose hypotheses. The behavioral perspective on market orientation explains how to conduct a market orientation. The resource perspective's explanation focus on how market orientation creates unique resources that allow for superior competitive advantage. The learning capability perspective focuses on a company's 'ability' to govern its influence regarding the utilization of market orientation. All three perspectives have statistically-nomological deduction on the SBU level, and all three perspectives focus on the explanation of their respective areas, which is one of the first building blocks in theory development.

Criteria 3: Empirical support

Popper would have named the empirical support criterion the absence of empirical rejection to emphasize that theories can not be proven but only survive attempts to dismiss them (Troye 1994: 219). It is easier to obtain empirical support for unfalsifiable statements than for statements that meets the falsification criteria. The empirical support will not only be a question of validity about what we observe, but also a question of whether what we observe is consistent with our own theory and alternative theories. Empirical support will thus be a description of the characteristics of a theory or a construct. Zaltman, Pinson and Angelmar (1973) describe these properties as the 'intention'. The intention is thus a description of the qualities and traits that belong to the concept/ theory, and the intention can be seen as a result of the abstraction process (Zaltman, Pinson and Angelmar 1973: 28) in that falsification is an element of abstraction. The empirical support of the concepts relates to these conditions. The empirical support is also strengthened by a review of the procedure on how the theory/ concepts are developed so that the validity of the theory/ concepts can be replicated.

This has implications for the market orientation perspectives. The behavioral perspective is defined to consist of three activities; intelligence gathering,

intelligence dissemination, and intelligence responsiveness (Kohli and Jaworski 1990), while Narver and Slater (1990) defines market orientation to include the three behavioral components of customer orientation, competitor orientation and inter-functional coordination as well as two long-term planning and decision-making dimensions profitability. These activities/ components are evaluated through the extent to which they have been validated. Kohli, Jaworski and Kumar (1993) published an empirically article that specifically addresses the validation of the market orientation concept, and explain in detail the operationalization, the area of application, the validation process, and included the operationalization of market orientation activities which have been validated through empirical studies. Also, Deshpandé and Farley (1996) validated the different scales.

For the resource perspective of market orientation, the aims of intelligence gathering and intelligence dissemination is to develop market knowledge and the systematic use of knowledge to guide the strategic directions (Hunt and Morgan 1995). The focus here is thus on what the market orientation adds to the company. The validation of this way to interpret market orientation includes Barney (1991), Barney (1994), Hunt and Morgan (1995), Day and Wensley (1988), and Menguc and Auh (2006).

For the learning capability perspective, the properties of market orientation have been tailored to the organizations' learning process in which the knowledge is developed on the basis of the continuous market intelligence the company provides. Validation of the scale of the concepts of organizational learning is described by Senge (1990), March (1991), Moorman and Miner (1997), and Kogut and Zander (1992). Further validation of the learning capability perspective leans on Teece, Pisano and Shuen (1997), and on Dickson (1992). Regarding the validation of the market learning capability perspective, empirical contributions come from Day (1994b), Hurley and Hult (1998), Li and

Calantone (1998), Morgan, Katsikeas and Appiah-Adu (1998), Sinkula, Barker and Nordewier (1997), Slater and Narver (1995) and Adams, Day and Dougherty (1998).

Summary. The empirical support for the three perspectives describing the validity of the concepts and review reviews the process of the validation of the concepts. All of the three perspectives have, in varying degree, been validated both in terms of content, concepts and operationalization. Thus the concept's presumed intention is strengthened through a critical empirical use of the terms. All three terms pass this test, which means that they are not redundant (Singh 1991). This is because they focus on different aspects of the orientation.

Summary of the evaluation

The assessment of the three perspectives on market orientation: market orientation as a behavior, market orientation as a unique resource, and market orientation as learning capability, demonstrates a number of similarities and differences. The most important conclusion from the analysis may be attention to how the perspectives capture different areas of the phenomena; and this affects how to measure market orientation and when the market orientation applies. Market orientation as a behavior describes the actual implementation the company makes when they process market intelligence. The resource perspective discusses how the company both creates its own resources and increases their ability to combine resources, while the learning capability perspective discusses how the company should encourage company's ability to learn.

2.3 Learning within organizations

The main question regarding the strategic core of market-oriented businesses in this book is to identify the market orientation learning within the organization.

The explanatory power within the behavioral perspective demonstrated that the target for the company's market orientation is intelligence activities, because the intelligence is a source of knowledge. The focus is placed on the practical implementation of getting the right intelligence to right person at the right time. For example, in the behavioral perspective, the three sets of organizational factors, the overall management factors, the dynamics between departments and organizational systems, strengthens or weakens the implementation of this businesses philosophy. The overall management factor consists of a description of the leaders' role in relation to risk, the distance between theory and practice, social mobility and education, attitude towards change and marketing manager’s ability to obtain trust among 'non-marketers'. Dynamics between departments is described by the degree of conflict, the association between the departments and interest in ideas from other departments, in other words, factors that describe the department's formal and informal relationships. For the organizational systems these factors within the organizational structure affects the market orientation implementation capacity. Issues such as departmentalization, formalization, centralization, and the acceptance of political behavior is referred to as organizational factors (see Kohli and Jaworski 1990, Jaworski and Kohli 1993, and Selnes, Jaworski and Kohli 1996 for empirical tests of the causes of market orientation as a behavioral process). Thus, market orientation explains how market knowledge is developed. However, the perspective gives no explanation on how the learning in the organization occurs and one cannot extract causal factors or performance factors from the learning.

The resource perspective was analyzed to emphasize how the market orientation process creates market knowledge, and upon which this market knowledge can be regarded as a strategic asset that the company can use in their strategic planning (Hunt and Morgan 1995). To identify the causes that promote the fulfillment of this market orientation perspective one need to use the explanatory mechanisms, such as Barney's (1991) resource competitiveness. Barney (1991) developed four requirements for resources to form the basis for competitive advantage, the VRIO elements. These requirements are Value, Rarity, Imitation, and Organizational factors. By promoting the existence of these requirements through internal control and development of resources, the resource perspective on market orientation seek to increase its competitiveness. However, this has a tone of tautology since the resource's competitiveness is the source to create resources with competitive advantage, leaving out the process that creates the resources. Therefore, this perspective on market orientation can not explain how the market knowledge is generated. This is because the perspective considers market orientation intelligence processing as a source of market knowledge and do only describe the activities intelligence collection and intelligence dissemination, i.e., activities, without going into detail on how the activity's implementation processes the intelligence.

The market orientation learning capability perspective has focused on the company's ability to continually renew the market knowledge. The idea is that the data (or market intelligence) does not necessarily lead to knowledge, nor that knowledge always evolves in the desired direction (Cohen and Levinthal 1990). By looking at market orientation as an intelligence process we have a focus on the direction and intensity of the learning organization that promotes a market-oriented mindset among the organization's members (Sinkula 1994). In order for businesses to facilitate their knowledge of the market, there must therefore be a shared perception of the need to improve the depth, quality and time to market knowledge and the market knowledge must be available when decisions should

be taken (Day 1991). The latter focus on the causes of market orientation will therefore not focus on top management risk attitude (see Kohli and Jaworski 1990), but rather on the manager's ability to signal the value and the importance of the organization to learn from the market (Schwartz and Davis 1981; McGill 1993). Thus, the learning capability perspective therefore focuses on what intelligence processing means for learning within the organization. Therefore, this perspective can be used when mapping market-oriented companies' ability to generate market knowledge.

The explanatory factors regarding the ability to generate the knowledge can be linked to the organization's values, since this affects a company's ability to maintain a specific strategy (Sinkula 1994). For the market-oriented company's values, its assumptions, and attitudes toward the goal of corporate purposes, will affect the market oriented companies development.

On this basis, the next part of the chapter draw on the organizational learning literature to increase our understanding of factors that affects the company's ability to perform the learning process in the market-oriented companies, and thereby their ability to generate market knowledge.

The content of the learning process

The learning perspective on market orientation focuses on how organizational processes develop market knowledge (Levitt and March 1988, Huber 1991; McKee 1992; Sinkula 1994; Day 1994a; Sinkula, Barker and Nordewier 1997; Craven, Greenley, Piercy et al. 1998). The idea is that the data (or market intelligence) does not necessarily evolve into knowledge, nor that all intelligence is useful intelligence. Today's society is characterized with an information amount which exceeds the limit to how much you can interpret without resorting to simplifications. Too much information creates noise, while

ignoring important information can result in missed market opportunities. This can be critical for a product manager in a company. For example, Nielsen Scantrack® measure 85 million retail product transactions a year, capturing conditions and sales in more than 350,000 stores across 30 countries and report on the sales of categories from beverage to entertainment and media products http://en-us.nielsen.com/tab/product_families/nielsen_scantrack. This means that one of the main objectives of the market-oriented companies is to develop an organization that is able to extract what information is relevant and important (Day 1994a), and efficient ways to process the information.

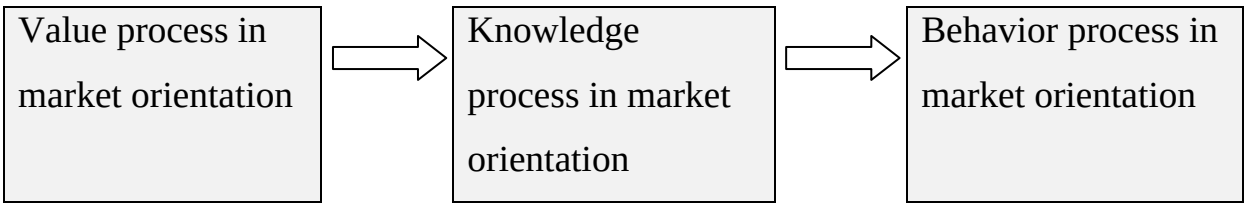
Within the organizational learning theory, the focus differs on how learning takes place. Some emphasize specific market intelligence (such as the intelligence gathering and dissemination) as mechanisms for learning to take place (Sinkula 1994; Slater and Narver 1995), while others emphasize mental models, shared organizational vision and open-mind approach to problem solutions (McCelland 1985; Senge 1990). The first relates organizational learning to knowledge acquisition, while the latter relates organizational learning to value creation.

Despite the growing interest in organizational learning (Senge 1990; Day 1991; Galera and Heijden 1992; Garvin 1993; Moorman 1995; Moorman and Miner 1997), including a growing awareness of its relevance to the organization's competitiveness, there is confusion about factors that produces a desire to learn (e.g. organizational values) versus intelligence-related behaviors which facilitate learning (e.g. market intelligence systems) versus changes in organizational systems, procedures, and market behavior that reflects organizational learning (e.g. organizational behavior) (McCelland 1985). These three elements are seen as key elements in organizational learning, but few studies have looked at the relationship between them (see Sinkula, Barker and Nordewier 1997). Sinkula, Barker and Nordewier (1997) argue that all three elements must be present in

order to maximize the efficiency and the ultimate productivity of organizational learning (i.e. the three micro processes).

Three micro processes

Market orientation in this book focuses on the ability to generate knowledge, and the focus is placed on the company's internal learning process as a source of development of this 'learning ability', i.e. the learning capability perspective on market orientation. The learning process in organizations is described through the presence of the three elements; the desire to learn, facilitation of learning, and reflection on that learning has taken place (McCelland 1985). This processing provides the basis for the understanding of three micro-processes where the 'desire for learning' is about the establishment of shared values for the desire to learn and is thereby identified by the value process, the 'facilitating learning' is reflected through the interpretation and meaning formation of data and is measured through the knowledge process, and the 'reflection on learning' is the measure of the potential of behavior change has occurred, and is measured through behavioral process (Agyris and Schön 1978; Levitt and March 1988, Senge 1990; Huber 1991; Levinthal and March 1993; McGill and Slocum 1993; Sinkula, Barker and Nordewier 1997).



The next chapters investigate the contents of these three above-mentioned micro-processes (reflection, organization and desire) in the learning process to the market-oriented businesses, so that the distinction between the micro-processes is mapped to be able to identify influencing factors.

Through such an analysis the micro-processes in the learning process can be linked directly to the learning process in the market-oriented companies, and one can map the congruence between the two perspectives. Congruence between the micro-processes in the learning process and the processes of market orientation will thus constitute an argument for investigating the learning process within market orientation. This can then be used when mapping the relevant causal variables to market orientation from a learning capability perspective, and one have cause variables that are developed on the basis of existing theories within organizational learning (Senge 1990).

Capabilities

Most organizational learning theories agree that the organization's learning ultimatum manifests itself through internal and external organizational behavior that reflects the operational changes of theories in use (Agyris and Schön 1978; Levitt and March 1988; Senge 1990). Huber (1991) defines organizational learning to be: *An entity learn if, through its processing of information, the range of its potential behaviors is changed* (Huber 1991: 126). This definition states that learning can occur regardless of who the object of learning are, an individual, group, organization, industry or society. And the attributes of the definition shows that learning does not have to be followed by a consequence, learning can occur without behavior changes. This definition thus claims that it is sufficient that the *potential* for changed behavior has occurred in order to establish that learning has taken place.

Organizational behavior that can take many forms, for example, Kohli and Jaworski (1990) response dimension that reflects market-based organizational activities, and Hunt and Morgan (1995) which looks at how the strategic competitiveness changes, or through learning capability perspective which identifies how the intelligence process facilitates the ability to develop and

combine resources. The importance of awareness about their capabilities is described by Teece, Pisano and Shuen (1990: 11) "*in our view, it is not only the bundle of resources that matter, but the mechanisms by which firms learn and accumulate new skills and capabilities, and the forces that limit the rate and direction of this process*". Here it is pointed out that it is the company's *expertise* to compile and develop resources that form the source of competitive advantage.

Day (1994) specifies the difference between resources and capabilities in that their capabilities can not be given a monetary value, and is so fundamental part of the organization's routines and practice that they can not be traded or imitated (Day 1994b). Capabilities are defined to be ... *complex bundles of skills and accumulated knowledge, exercised through organizational processes, that enable firms to coordinate activities and make use of their assets* (Day 1994b: 38). In order to specify their capabilities in organizational learning, Day (1994a) defined this to be *an complex bundles of skills and collective learning, exercised through organizational processes, that ensure superior coordination of functional activities* (Day 1994a: 38).

The learning capability perspective looks at the learning achieved from the company's enhanced opportunities to use corporate resources to conduct the market orientation activities. The market orientation learning capabilities therefore represents a resource to perform its market orientation activities more effectively (Day 1994a). This leads one to the following definition of market orientation as learning capability:

An organization learns about its market orientation resources, if, through the processing of market information, the range of its potential market orientation activities is changed (Sandvik 1998: 42).

The definition notes that organizations learn about their market orientation through the knowledge of the organization's resources, how they can be selected, developed, exploited and combined to provide different forms of market orientation activities.

Factors that facilitates organizational learning

There is a distinction between learning at the individual and organizational level. Organizational learning is not the sum of the individual learning that takes place in the organization. Many organization theorists do not accept that organizations can be considered as learning devices (Grant 1996). The definition of these organizations is a constructed concept, which means that organizations themselves can not accomplish things. However, one can conclude that the individuals interact, and that the sum of the knowledge the organization possesses is not equivalent to the sum of individual knowledge (Cyert and March 1963). Organizations have certainly no brain, but they have cognitive systems and memories (Hedberg 1981). Members come and go, and leadership changes, but the organization's memory continues in certain behaviors, mental maps, norms and values over time (Daft and Weick 1984), for example, standard operational procedures consists of behavioral repertoires that are available to members, and often these will be passed on between people (Cyert and March 1963, Simon 1991).

By viewing organizations as cognitive entities the understanding how they process market information is critical for understanding how they learn. In principle, one can only speak of knowledge when it regulates new ways of thinking. At its most basic level, learning is defined as production (through the development, verification, or restructuring) of knowledge (Cohen and Levinthal 1990). Market orientation, through intelligence gathering, dissemination and use, involves a continual reassessment of market knowledge, and thus we can

define market orientation as market learning. Within the market orientation, market intelligence processing is a necessary condition for organizational learning, especially since this is the process where the intelligence is transformed into knowledge (Huber 1991; Sinkula 1994; Day 1994b; Sinkula, Barker and Nordewier 1997).

The organizational learning directions can be said to have four main elements within the market intelligence processing. This is intelligence gathering, dissemination, interpretation and memory (Huber 1991; Sinkula 1994; Day 1994b). Each of these constructs constitutes a micro-process within the broader concept of market intelligence processing. Gathering and dissemination is the process by which information is made available for interpretation, interpretation is the process by which information is given concurrent opinion, while the organizational memory is the process where knowledge is stored, physically or cognitively for future use.

For the establishment of opinion-formation the theory has two main directions to explain how complex, dynamic environments degraded into fragments of interpretation. The first implicit view of opinion formation is normative, where the environment is seen as visible, they need only be detected and mapped, leaders are rational and have good information about the opportunities and threats and how to overcome limitations and that there is a consensus among the leaders of market characteristics and the relative competitive position in the market (Hofer and Schendel 1978). *Implicit in this idea that individual organizations adapt to their environment are the ideas that organizations learn what their environment is and which organizational design features work best in their particular environment* (Daft and Huber, 1987: 3). Learning in this context thus consists of absorbing and sorting information.

This view of opinion formation has been challenged by a growing and corrective vision of learning where the focus is on the mental model or representation that the leadership group uses to form opinion about their environment (Daft and Weick 1984). The leaders must reduce or absorb ambient uncertainties to make decisions, and the information is followed by an interpretation of the environment (Isabella 1990). The further use of the information can thus be controlled so that managers develop the ability to ask the right questions at the right time, absorb the answers to their mental models, share the new understanding with others in the organization and then to act in an appropriate manner (Day 1991; Day 1994a).

The market orientation context, being the activity intelligence processing, is the element that generates learning. This is because the employee will decide what information is relevant to collect, they will disseminate relevant and timely intelligence to the proper recipients, and that intelligence should be forwarded with a meaning that corresponds to the meaning it had when it came into the process. One see, in other words how market orientation intelligence processing is part of the knowledge process where the data is given meaning (Huber 1991). All three market orientation perspectives generates knowledge through intelligence processing, but one see that only the learning capability perspective has focused on the learning process within the organization. Thus, this perspective will be able to control the knowledge process in such a way that the organization is convinced of the relationship as such, e.g. the interpretation of data affects the knowledge that the information processing generates (Isabella 1990). The learning capability perspective will, through a focus on intelligence processing, manage the elements in the process so that the knowledge it generates has market orientation capabilities as the purpose.

Creating a desire to learn

A learning orientation in the organization increases the tendency to create and use knowledge (Sinkula, Barker and Nordewier 1997). A learning orientation affects the degree of whether an organization is satisfied with the theories in use, and whether proactive learning takes place. A learning orientation affects the information service in the knowledge process through interpretation, evaluation and whether the knowledge will be accepted or rejected, ergo the behavioral process (Hedberg 1981; Sinkula, Barker and Nordewier 1997). A strive for a learning orientation in the organization therefore results in positive effects on the organization's ability and effect of learning.

The goal is to establish an organization that is motivated to learn in a coordinated direction. From the goal of including the formation of shared mental models and shared understanding, the micro-process creates a joint desire to learn, and this micro-process is referred to as value in the learning process since it focuses on the total value which affects the intensity and direction of learning (Sinkula, Barker and Nordewier 1997). The behavioral perspective on market orientation will have no benefit of the value process since this view of market orientation depends on the ability to implement the activities. Neither the resource perspective will benefit from this understanding of organizational learning since the focus on learning only can be seen from the level of produced knowledge.

Learning motivates by the organizational value’s impact on the organization desire to create and use knowledge (Sinkula, Barker and Nordewier 1997). The desire to learn is affected by such factors as sense of shared commitment to learning, an open mind to absorb new learning and the willingness and ability to unlearn the existing 'expired' theories in use, by shared vision - both the overall learning vision but also the vision of market orientation, and by motivational factors that promote the organization's willingness to learn about the market.

The purpose is to develop a reward system that promotes the willingness to learn, and to stimulate a cumulative effect of existing knowledge which motivates and increases the ability to apply new knowledge. Also the organization's access and exit of employees will affect the organization’s ability to learn since this gives access to new ways of thinking, but also breaks up existing learning procedures.

Summary of organizational learning

This chapter has discussed how the market intelligence processing system (i.e., intelligence gathering and dissemination) are perceived both as a mechanism for learning to take place, as well as a process for the creation of values (Sinkula, Barker and Nordewier 1997). Previous research on learning separated between conditions that promote learning, conditions that must be present to generate learning, and conditions being a result of learning (Senge 1990; Huber 1991; Sinkula, Barker and Nordewier 1997). In this project I relate learning to the behavior that reflects organizational learning (behavioral process), the intelligence-related behaviors that support learning (knowledge processing) and factors that motivates learning (process value). This enables one to identify micro-processes in the overall learning process.

Thereby, I relate these micro-processes within market orientation to the organizations learning capability. This understanding of market orientation relates the transformation of market data into knowledge and strategic decision making by the market-oriented company.

Chapter 3. Market orientation capabilities

This chapter will review the learning process within market-oriented businesses, and relate it to three market orientation capabilities. The chapter is divided into two parts. It will first discuss the process that reflects whether market orientation learning has taken place, and will then discuss hypotheses related to factors affecting learning within market-oriented companies.

3.1 Knowledge development in market-oriented companies

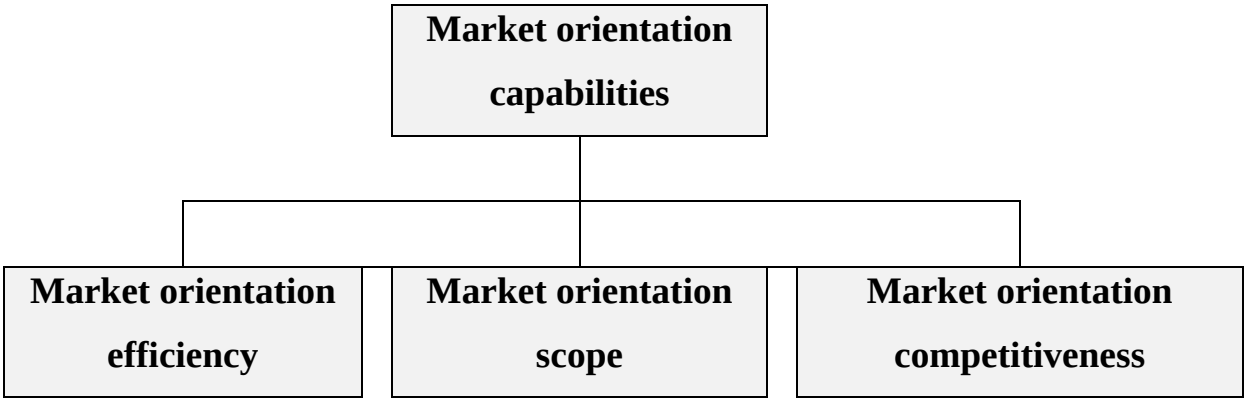
the learning perspective in market orientation focuses on how the market intelligence process generates knowledge. This is done by relating market orientation to the three micro-process dimensions (the value process, the knowledge process, and the behavioral process). Sinkula, Barker and Nordewier (1997) in their study, related the market intelligence process to the three micro-processes; however, they focused on how the value process affects each market orientation activity separately, and used the response dimension by Kohli and Jaworski (1990) as the dependent variable. This causal link in market orientation assumes that an organization's ability to generate market intelligence affects their ability to disseminate market intelligence. However, Hunt's (1991) definition of learning, which identifies it as change in the scope of potential actions, means that a given level of intelligence generation will not be able to capture this change. Moreover, I argue that an alternative way of analyzing the learning process in the area of market orientation is to focus on the market orientation activities simultaneously, rather than on a causal link. In other words, companies can prioritize, combine and implement market orientation activities in different ways and with varying degrees of success. For example, one company may be proficient in collecting intelligence from the market but may be poor at responding to the intelligence gathered. Others may be good at implementing market intelligence through their strategic plans but at a later stage are unable to realize the plans.

Market-oriented companies that emphasize learning will improve their ability to collect and process the market intelligence. When a market is in constant change (Dickson 1992), the information occurs in new places and new sources. The variety of social networks on Internet illustrates this dynamic. A company with a static view on how to conduct the market orientation process will therefore soon be outperformed since it will be unable to capture the

new intelligence channels. Therefore, it is fruitful to look at the strategic consequences which learning has on the companies' ability to perform a market orientation. These strategic consequences of market orientation can be defined as… *the firm's capability to integrate, develop, revise and use market knowledge, as the firm's competence related to market orientation, to address changes in the market* (Sandvik 1998: 155). Thus it is the company's revised strategic market opportunities that need to be used as a measure for learning within the company.

3.2 Three market orientation capabilities that reflects organizational learning

The next three sub chapters will discuss three means to identify organizations learning based on the market intelligence processing. The first is about the development of an improved ability to carry the market intelligence system. This ability reflects the amount of resources used to implement the intelligence system. The second sub chapter investigates the company's ability to capture and interpret market changes. This ability is believed to be cumulative based on existing knowledge, and affect a company's ability to explore and penetrate new market segments without increasing the degree of market error. The third sub chapter discusses the company's development of tacit knowledge regarding the implementation of the market intelligence activities. This tacit knowledge implies that other companies can not copy or replace the market intelligence systems easily, and the tacit knowledge within market orientation therefore constitutes a competitive advantage.



Capability 1: Market orientation efficiency

One reason why market orientation is rare among companies is that it requires both time and resources to implement market orientation (Kohli and Jaworski 1990; Narver and Slater 1990, Slater and Narver 1994). Access to resources will always be a key factor for businesses, and if the resources used to be market oriented exceed the effects from being market oriented, the company is not able to perform the market orientation activities in an appropriate manner. Related to this, the process will consume more resources than it generate.

It has been argued that market orientation leads to increased knowledge of the market which the non-market-oriented businesses cannot obtain. The amount of market knowledge that is developed is limited by the companies' ability to carry out the market intelligence activities. Cohen and Levinthal (1990) describe how a company's existing knowledge level leads to increased ability to interpret and generate new knowledge. This knowledge is described as the organizations absorption capacity. Cohen and Levinthal (1990) claim that …*the ability to evaluate and utilize outside knowledge is largely a function of the level of prior related knowledge* (Cohen and Levinthal 1990: 128). The continuing intelligence processing therefore not only increases the cumulative development of market intelligence, but also to the cumulative knowledge of how well the

company conducts the market orientation activities. For market-oriented businesses, this means that the more knowledge they have about the market orientation activities, the better able they will be to carry out the activities. The learning produces knowledge, which in turn enhances the organization's absorption capacity. Learning is thus a self-reinforcing effect that supports learning as a source of competitive advantage in that new knowledge develops on the basis of existing knowledge. In this way, the market-oriented businesses will be superior to other companies in their ability to capture and interpret intelligence from the market.

Learning concerns both the ability to know where the intelligence exists and to understand what kind of intelligence that is of interest (Day 1994a). Moreover, these companies will be better to disseminate timely and relevant intelligence, while irrelevant intelligence is stopped. One will increase the ability to pass on intelligence to people with decision-making authority. These, in turn, are able to see the importance of the received intelligence, and this stimulates an active intelligence gathering from employees at lower levels within the organization.

Contrary, companies that are not market-oriented do not have a focus on an intelligence flow within the organization. They will miss important intelligence about market changes and trends, and their strategic choices must be built on reactive rather than proactive market changes. The performance of the three market orientation activities is therefore a symptom of market orientation as a syndrome. The syndrome reflects the resources used to perform a market orientation. *The more match among the three dimensions of market orientation information system activities, the less waste of resources and the more efficiently the different activities are performed* (Sandvik 1998: 61). This increased efficiency result in an increased level of success regarding to a company's marketing decisions. Therefore, companies that conduct market orientation in an unstable or incoherent manner not achieve this effect. This is because they

experience a gap between the implementation of the different activity processes. Treating market orientation as a syndrome enables an identification if this gap.

One can assume that one of the strategic consequences of market orientation is more efficient market decisions. Market decisions are done on the basis of intelligence from the market and the market-oriented companies will, through learning, be better to assess and evaluate the intelligence. This assessment is an increased ability to identify the sources of intelligence, collect the right amount of intelligence, increased ability to interpret intelligence, see the importance of the intelligence, distributing intelligence within the company, and react out of the signals give intelligence. Ergo, the market-oriented companies will have greater knowledge of the market. These advantages, however, are only efficient as long as the resources supplied to the process are less than the resources it generates. Therefore, it is those companies that have the greatest ability to carry out the market intelligence system that has the greatest strategic gains.

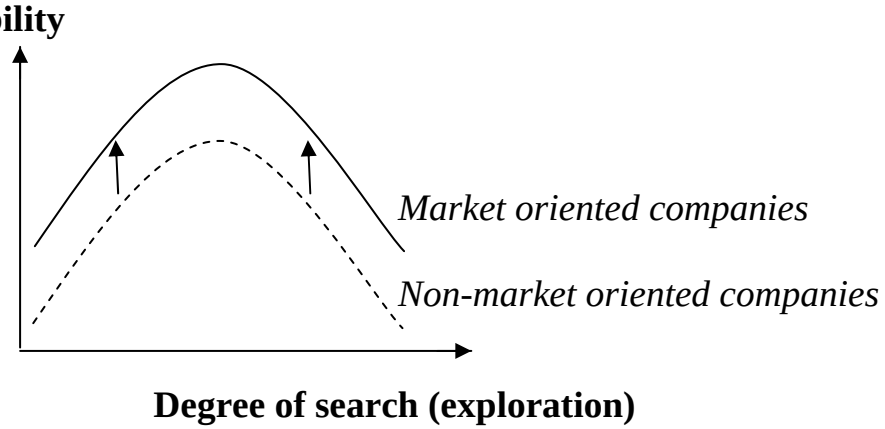
Capability 2: Market orientation scope

The market oriented companies have to balance whether they want to perform a narrow market orientation or to focus on a broad market orientation. Under a narrow focus they concentrate on the existing markets which they already serve. In contrast, a broad focus will be the difference between the available market and the already-served market. Dickson (1992) described how the market is constantly evolving, and how supply and demand affect access and departure of market segments. A narrow market orientation focus will therefore be a presence on existing markets, a strategy that is risk-neutral, but that does not give the company the opportunity to explore new markets. A broad market orientation concentrates the attention around the markets they currently do not serve. This is not only new market segments within the same industry, but also new areas which the company has a potential to serve.

The trade-off between a narrow or broad market orientation focus can be related to March (1991), who distinguishes between 'exploitation' and 'exploration', see also Morgan and Berthon (2008). Companies must find a balance that satisfies both the long-term profitability and the ability to discover new markets. Exploitation describes a behavior where one seeks to maintain the existing. Thus, retained what already exists, which is tested and developed and that the company know works. Such an attitude is risk averse in that the company does not risk the time or resources to unknown areas where they do not know if we will succeed. The opposite is exploration, where the attitude is more searching for new ways of doing things. This is thus subject to a risk-willing attitude where the company is in constant search for new ways to carry out tasks, and where they have an external focus on the corporate environment. This way of doing business may be so experimental that the company loose focus on the existing. In the long run it can therefore result in reduced profitability. According to Kyriakopoulos and Moorman (2004:219), a company's market orientation …*allows it to combine marketing exploitation and exploration strategies effectively by providing a unifying frame of reference focused on customer goals, facilitating market information flows between the two strategy processes, and integrating the two activities by serving as a dynamic market linking capability.*

Focusing only on current and potential customers and competitors in the existing market segments can be destructive in the long run. However, being too focused on the new segments can also lead to loss of position and profile among the current segments. When relating the market-oriented companies to their 'learning capability', the focus is on company’s ability to develop a unique knowledge of the market (Day 1994a). The learning capability perspective on market orientation shows that market oriented companies develops a superior ability to update their market knowledge. This knowledge enables the company

to consider new markets to be less risky compared to businesses that do not pursuit a market-orientation. These market-oriented businesses will experience less risk of investing in new markets, and this will increase their profitability. This risk reduction occurs because the companies are able to perform more informed decisions for market development as well as greater knowledge about the threats from competitors and other external factors.



Increased market knowledge will therefore enable the company to explore more of the market without compromising the profitability. March (1991) assumes that the shape of the relationship between 'degree of search' and the performance is inversely U-shaped. This will also be the case for the market-oriented businesses, but I expect a positive shift in the 'search-curve' in that the company has increased capacity to invest in new opportunities without risking loss of profitability.

Capability 3: Market orientation competitiveness

Tacit knowledge is a shared understanding which is developed internally in the organization. Shared understanding is related to procedures, often taken for granted within the organization. Such social interaction can not fully be encoded or recorded, and is therefore tacit in nature. This knowledge is therefore peculiar

to this company and can not automatically be transformed or imitated by competitors. As a consequence, the market orientation capabilities can be difficult and expensive for competitors to imitate, and thus it may be a source of superior long-lasting competitive advantage.

Zander and Kogut (1995) has developed four dimensions of tacit knowledge that can be used to evaluate whether the market orientation capabilities are tacit. These are the absence of encoding, which refers to the degree to which market learning and exploration can be explicit (e.g. manuals, and extensive documentation), the absence of formal learning, which refers to the degree to which employees can learn about the organization's market orientation by increasing their own knowledge through formal education and/ or to talk with employees with this type of expertise. Complexity is the number of mutually influencing elements behind the company's market orientation. The more items that must be integrated to become market-oriented, the harder it will be for competitors to imitate them. The last dimension is the dependency system that captures the degree of whether to implement market orientation is dependent on employees with different experience. The larger width there is on the employees' area of expertise and resources, the harder it will be to be market oriented. Market orientation that is characterized by low ability to encode, low opportunity for formal learning, high complexity and high system dependency represents a capability with high tacit knowledge. With other words, the employees know more than they are able to tell (cf. Polanyi 1966, see Kogut and Zander 1992: 383).

Market orientation is thought to function most efficiently when it is performed as a tacit routine. Thus the organization members know how market orientation resources can best be used to conduct the market orientation activities. Adams, Day and Dougherty (1998) points out how complex collective behaviors are not

possible without shared routines that can be easily reproduced. This is because the routines minimize the necessity to redefine every situation.

3.3 Hypotheses: factors that affects the market orientation capabilities

The factors that affect the organization's learning regarding market-oriented is not similar to the previous factors that have been seen as causes to market orientation (see Jaworski and Kohli 1993; Hult and Ferrell 1997; Powpaka 1998; Ruekert 1992: Li and Calantone 1998; Selnes 1996; Horng 1998). The difference lies in that the former researchers investigate market orientation as an activity processes. There is, however, important to focus on market orientation as knowledge-forming intelligence process. Issues such as the top leader's signaling of importance of market orientation, organization structuring and centralization is thus the underlying factors that must be present to carrying out the market orientation activities in practice. By looking at market orientation as an intelligence process I will have a focus on the direction and intensity of the learning organization that promotes a market-oriented mindset among the organization’s members (Sinkula 1994).

The three micro-processes (value process, knowledge process and behavioral process) which were derived from the learning process in Chapter 2.3 described the learning process in an organization. The behavioral process level measures whether market-oriented learning has taken place, the value process level is included as a significant influence on the knowledge process, while the latter refers to the company's ability to include shared opinion formation, and this process is thus implicitly given in the behavioral process. In other words, it is

not relevant (neither possible) to measure the knowledge process explicitly in a business (see Sinkula, Barker and Nordewier 1997 for the same reasoning).

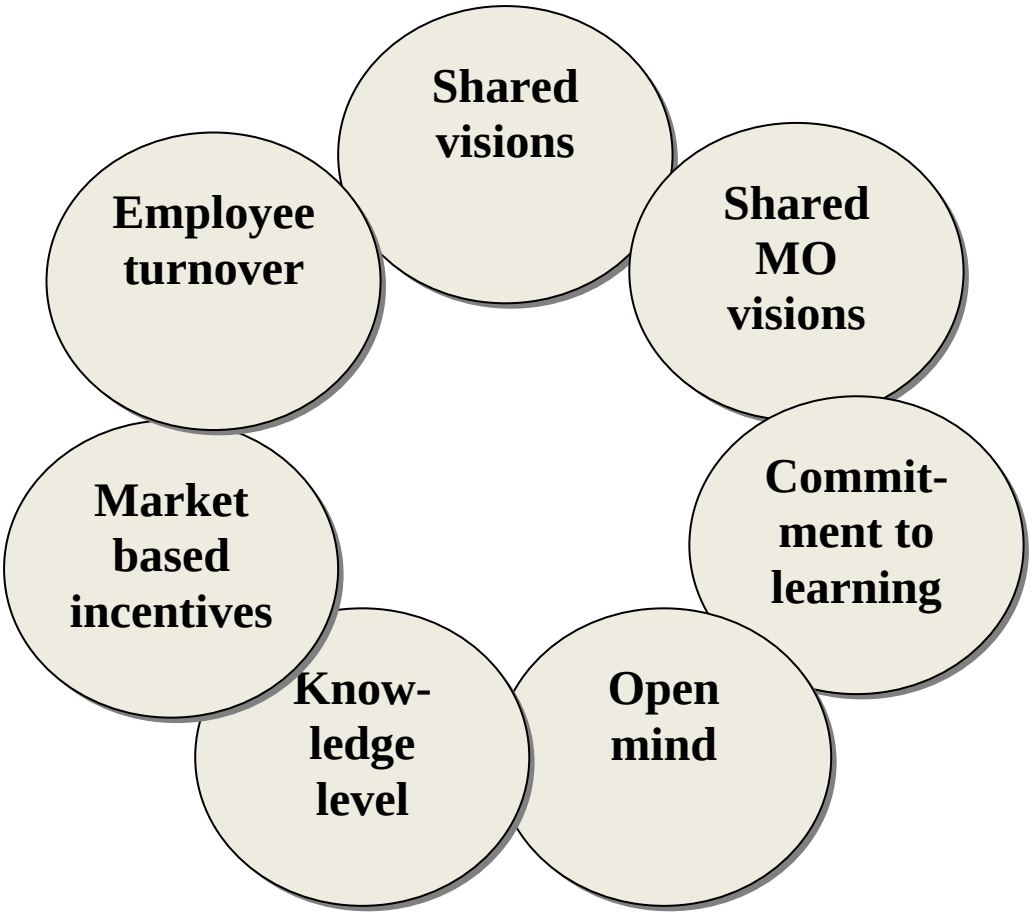
The literature on market orientation discusses culture, and have concluded that to develop and maintain a higher level of market orientation this is contingent on the achievement of market orientation in the "heart and mind" to the organization members (Harris 1999). Kelley (1992) analyzes the 'implementation' of market orientation from a cultural perspective and the conclusion is that the 'implementation' of market orientation is strongly associated with the organization's acceptance of the strategy, an acceptance termed 'beliefs' or confidence. However, this one-sided focus on belief in market orientation is not enough to secure adequate changes. According to Harris (1999) one must have the dimension of 'understanding'. He postulates that the employees do not fully believe in market orientation if they do not know what it implies. Furthermore, according to Harris (1999), although the understanding and belief in the value of market orientation is critical, the final qualification of the orientation consists of 'commitment' (Harris 1999: 93).

The value of the market intelligence is realized through the development of knowledge to combine resources in a strategically desirable way, ergo the knowledge component in their capabilities. The learning capability the perspective of market orientation points to the 'ability' to learn from the market as a source of competitive advantage in that they consider this ability to be the scarcity factor in the development of market knowledge.

Learning motivated by the value that emphasis organization’s will to create and use knowledge. The desire to learn is facilitated by factors as a sense of shared commitment to learning, an open mind to absorb new learning and the willingness and ability to unlearn the existing 'expired' theories in use, the shared vision - both the overall learning vision but also the vision about market

orientation, the motivational factors that promote the organization's willingness to learn about the market, so as to develop a reward system that promotes learning. The cumulative effect of existing knowledge motivates and increases the ability to apply new knowledge (Agyris and Schön 1978, Hedberg 1981, Levitt and March 1988, Senge 1990; Sinkula 1994; Day 1994a; Sinkula, Barker and Nordewier 1997; Lei, Slocu, and Pritt 1999). The organization's access and departure of employees will affect the ability to learn in that this both gives access to new ways of thinking, but also breaks up existing learning routines (March 1991; Simon 1991).

The following sections will deduce hypotheses regarding factors that, in light of the described necessity of a 'desire' to learn of the organization, is believed to have influence on the market orientation learning process (McCelland 1985).



Shared visions

For organizations to have a shared goal orientation on learning, they must share the same visions about the company's operations (Kelley 1992; Sinkula 1994; Day 1994a; Sinkula, Barker and Nordewier 1997; Morgan, Katsikeas and Appiah-Adu 1998). Shared visions give direction on the focus of the energy, bond and purpose of the organization's members (Day 1994a). Without binding to and agreement on the direction the organization should take, the motivation for learning will be lower. Moreover, without a shared vision, it is likely that individuals do not know which organizational expectations that exist, which results to measure, or which theoretical foundations they are based on (Day 1994a; Troye 1994). Senge (1990: 206) define shared visions to be the answer to the question "what will we create". Day (1991) points out that for learning to take place there must be a shared understanding of the need to improve the depth, quality and time of market knowledge and availability of knowledge when decisions will be taken.

Shared vision can have two purposes, either an external (extrinsic) or internal (intrinsic) purpose (Day 1994b). The external view focuses on achieving something in relation to anything outside the company, for example, against a competitor – e.g. Pepsi's expressed competition against Coca Cola. Such a view of vision means that once the vision is achieved the company occupies a protective posture in that they must 'protect what they have' and such a defensive posture will undermine creativity and excitement of building something new. The internal purpose of visions creates a culture that is not satisfied with the goal of being 'the best' but rather to seek perfection by constantly seeking to 'get better'. *It is not what the vision is, but what it does* (Senge 1990: 207). Day and Nedungadi (1994) divide the management's attention into four clusters; self-centered, competitor-centered, customer-centered, and market centered. The attention forms the basis for the creation of mental models and they found that

the different clusters had significant impact on the intelligence which the leaders searched for and used.

The concept of vision can also be linked to generative learning in that it is this type of learning which consists of the ability to new thinking; it requires that the organization has the will to evolve (Agyris and Schön 1978, Senge 1990; Morgan and Berthon 2008). In situations where one does not have a clear vision, the motivation and willingness to learn will be difficult because the employees do not know what to learn and where to focus. Thus, the shared visions are a means to direct people in the organization to interact on shared goals. An interaction that increases because of a shared vision is therefore part of the employees' opinion formation regarding the organization's existence. *Shared visions compel courage so naturally that people don't event realize the extent of their courage. Courage is simply doing whatever is needed in pursuit of the vision* (Senge 1990: 208). This means that one can look at shared learning visions as a company's cultural foundation which the organization operates through. Also Deshpandé and Webster (1989) define corporate culture to include the element shared vision. This is explicitly expressed in their definition of corporate culture that …*the pattern of shared values and beliefs that help individuals understand organizational functioning and thus provide them with the norms of behavior in the organization* (Deshpandé and Webster 1989: 4).

As early as in 1988, Webster pointed out that market orientation requires a platform of shared values and assumptions of a culture shared by members in an organization (Webster 1988: 37). Senge (1990) detailed these shared values and assumptions as being essential for an organization to achieve shared goals (see Sinkula, Barker and Nordewier 1997). In order for companies to increase their market knowledge, there must be a shared perception of the need to improve the depth, quality and time to market knowledge and availability when decisions should be taken (Day 1991). Therefore, this focus on causes to market

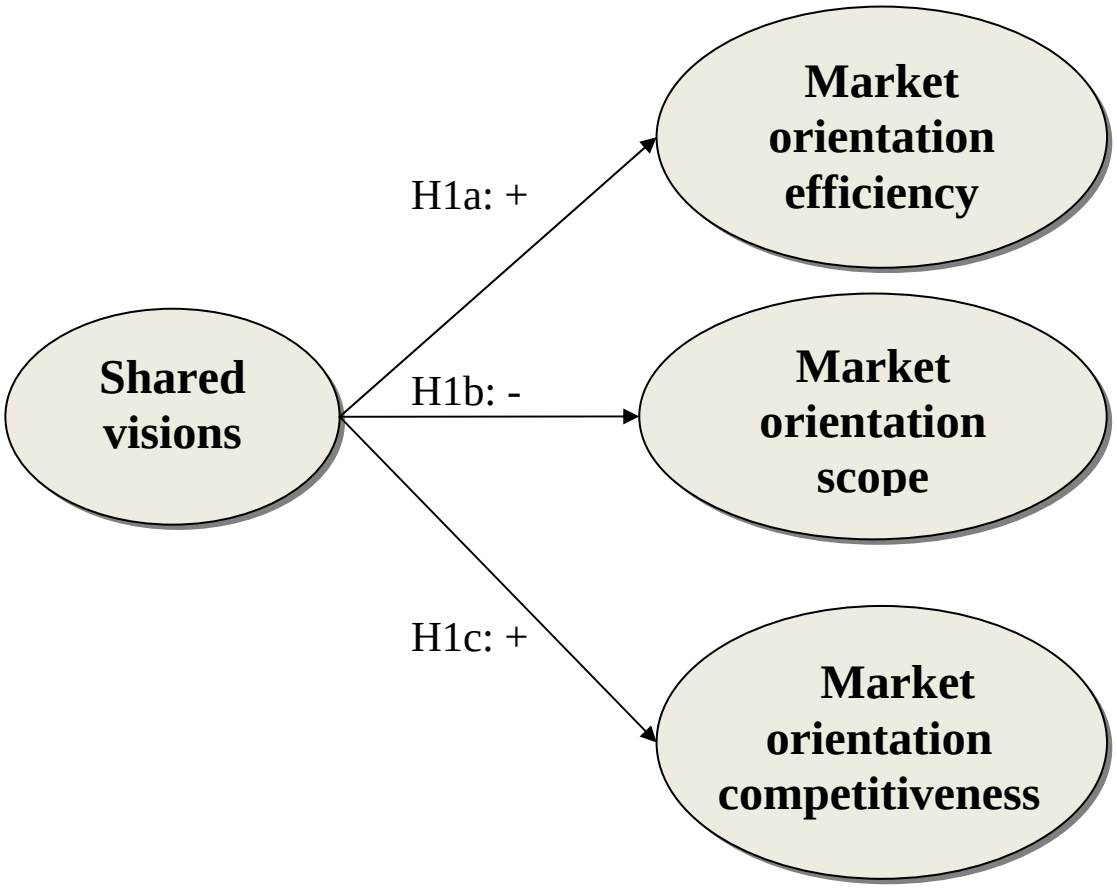
orientation is on leaders' ability to signal the value and importance that the organization learns from the market (Schwartz and Davis 1981; McGill 1993). Risk is then seen as a natural part in the effort to seek new opportunities in the market, and to maintain and develop the company's shared vision (Senge 1990: 209).

Thus, the organization's core values affect the company's ability to maintain a specific strategy. The market-oriented company's development will be affected by the company's core values, its assumptions and attitudes towards the company's goals. And, this development will be shared between management groups (Day 1994a). I predict that shared vision will positively affect the market orientation efficiency. When employees share the same vision this increases their ability to identify their own role in the system and this will increase their ability to critically evaluate the content and conduct of their duties. As a result, the employee's implementation of market orientation is strengthened through the understanding of shared visions. Normann (1985) points out that a strategy has three elements, formulation of vision, behavior based on vision, and interpretation and reflections that have been made of the behavior. Adams, Day and Dougherty (1998) show how shared vision must be present to implement the entire market orientation process. Shared visions enable mechanisms for the learning process (Adams, Day and Dougherty 1998: 413). Without shared vision it will not be possible for the employees to develop into a shared goal, and the members might disagree on the purpose of the market orientation operation (Sinkula, Barker and Nordewier 1997). Therefore, I expect shared visions to positively affect the efficiency of the market orientation intelligence activities.

Secondly, I predict that shared visions negatively affect the market orientation scope. Little empirical research has investigated the impact of shared visions on the exploration and exploitation of markets. One can, however, assume that shared visions have a negative effect on market orientation scope, because its

purpose is to coordinate the employees. Therefore, shared visions might hamper the ability to exploit markets.

Finally, I predict shared visions to positively affect market orientation competitiveness. Shared visions guide the employees in how to perform the market orientation activities. Shared visions facilitate absence of learnability and codability, which means that the market orientation activities are learned through experience (Zander and Kogut 1995). Knowledge that is formed on the basis of shared vision therefore helps to guide the direction in the organizations evolvement. One can therefore assume that the company's overall vision will have a positive impact on the company's amount of tacit knowledge, which identifies the market orientation competitiveness.



H1a: Shared vision has a positive effect on market orientation intelligence
H1b: Shared visions have a negative effect on the market orientation scope
H1c: Shared vision has a positive effect on market orientation competitiveness

Shared market orientation visions

While shared vision is about the company's shared motivation to affect the direction of the orientation into shared goals, a shared market orientation vision is about the agreement of performing a market orientation. Thus, those companies that choose to be market oriented have a mission to fulfill this orientation, and to investment in the market orientation. Therefore, it is necessary to look at conditions around the shared market orientation visions. This is consistent with Harris and Ogbonna (1999) who pointed out that a cultural willingness and ability of market orientation could only be detected if it was measured in the context of other sub-cultures within the organization.

Rather than focusing on market orientation as a cultural manifestation within the organizations, Harris and Ogbonna (1999) suggest to look at the members' vision of market orientation. Therefore, shared market orientation visions motivate the employees to perform the market orientation activities. This 'motivational view' on the sub cultural aspect of market orientation is partially supported by Slater and Narver (1994) who argue that …*the critical challenge for any business is to create the combination of culture and climate that maximizes organizational learning on how to create superior customer value* (Slater and Narver 1994: 63). Thus it becomes a question of maximization of motivation for learning regarding the market, and not absolute required values. *Market orientation is the organization culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business…*
…Creation value for buyers is much more that a «marketing function: » rather, a seller's creation of value for buyers is analogous to a symphony orchestra in which the contribution of each subgroup is tailored and integrated by a conductor-with a synergistic effect (Narver and Slater 1990: 22). Narver and

Slater (1990) put quite a large emphasis on the cultural value of market orientation. Hedberg (1981) emphases the ability to direct the development of the sub-cultures by stating that … *organizations do not drift passively with their members' learning: organizations influence their members' learning, and they retain the sediments of past learning after the original learners have left. …The actors act, but they are directed. They are assigned roles, they are given scripts, and they become socialized into a theater's norms, beliefs, and behaviors* (Hedberg 1981: 6). Thus the market orientation vision measures whether the organization has a vision of the market as a sub culture according to their market focus. Gebhardt, Carpenter and Sherry (2006: 37) propose that …*creating a market orientation requires dramatic changes to an organization's culture and the creation of organizationally shared market understandings.*

As the organization grows in size and age, part of their market intelligence processing will require a more unique and meaningful intelligence to draw conclusions about the market (Senge 1994). These search procedures will therefore be influenced by the vision that prevails in the company. Shared market orientation visions will evolve to be a deeper manifestation among the employees about the importance of market and its learning (Hurley and Hult 1998). This manifestation guides the employees search for market intelligence, and their constantly awareness of changes and developments in the market. Thus, shared market orientation visions serve as a vision that gives the employee direction on the process in accordance with a dynamic market development.

I predict that shared market orientation visions positively affect market orientation efficiency. The shared market orientation visions consist of visions of putting customers in the focus of the company's business, as well as awareness of the importance of intelligence and knowledge about influential competitors and environment. Shared market orientation visions facilitate the organizational learning orientation since the employees know how to perform

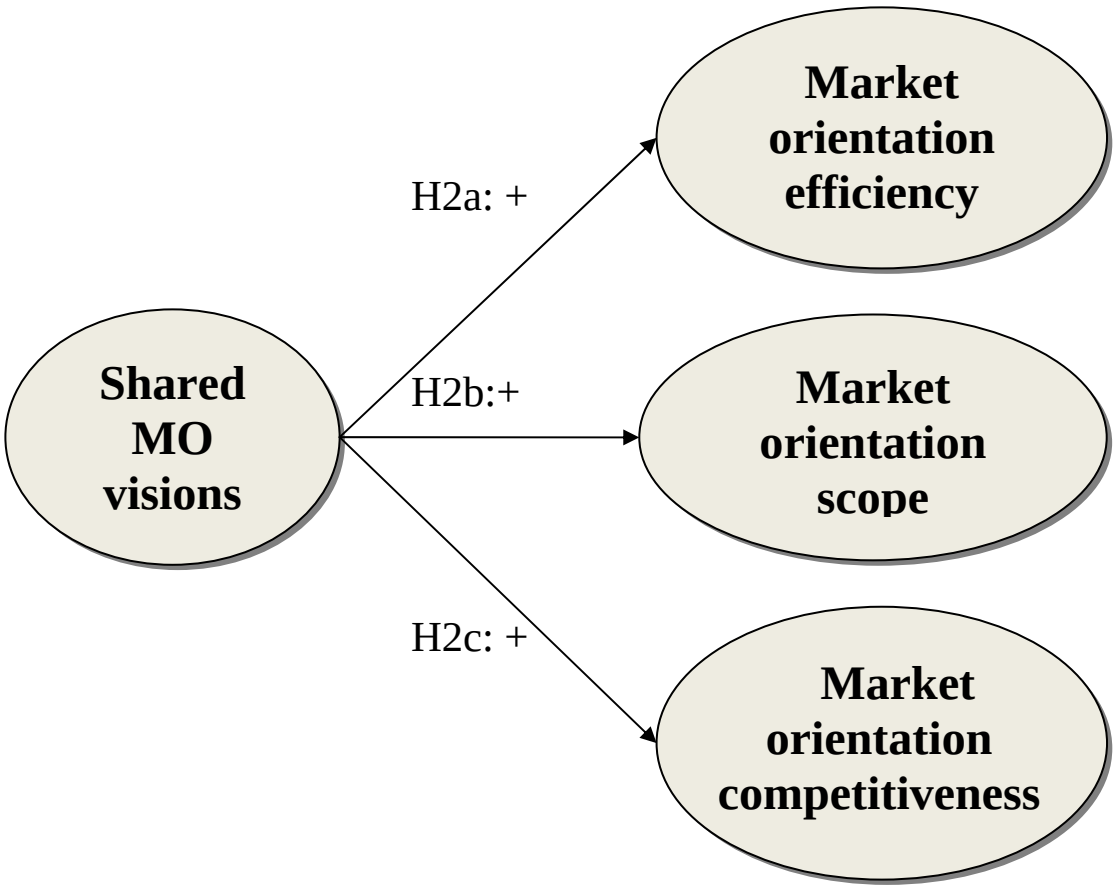
the market orientation activities. When the company has vision that is built on market-based learning, the company will be better at implementing the market orientation activities.

Knowledge of resource combinations forms the basis for capabilities, which facilitates the market learning. The company will focus on the implementation of intelligence activities, and the employees will develop knowledge about how the intelligence is, in addition to whether the intelligence is of interest of not (Day 1994a).

Second, I predict that shared market orientation visions positively affect market orientation scope. The scope of the market orientation activities reflects the willingness and ability to discover new markets and trends, and respond proactively to the changes. This ability to discover new markets is necessary when the market is in constantly change (Dickson 1992). Through the shared market orientation visions for the business area of learning, these companies develop a unique ability to discover new markets (March 1991). A company that has these visions will create a business that is evolving to be in a better position to look beyond the existing scope. This also comes as a consequence of the shared market orientation visions ability to learn across the organization to concentrate on the market. They will therefore develop a capability to react to a dynamic and changing market, and develop routines accordingly.

Finally, I predict that shared market orientation visions positively affect market orientation competitiveness. The competitiveness is about the tacit knowledge in the organization. Shared market orientation visions positively affect market orientation competitiveness because it increases the organizations unspoken understanding of how to perform the market orientation intelligence processing.

When the tacit knowledge dimension includes the absence of learnability (Zander and Kogut 1995), these organizational practices have to be learned through experience. Here, the orientation of the experience to be managed by the shared market orientation visions develops procedures about how to conduct the market orientation. Knowledge that is formed on the basis of the shared market orientation visions help to indicate the direction the organization should develop into, and that this direction is guided towards the dynamic search for new solutions and opportunities. Lyles (1992) shows how the peripheral knowledge deals with knowledge of sub objectives within a company. These sub objectives will be in the form of procedures for implementing activities to support the core knowledge, to support the main objectives, and to emphasis market orientation. Knowledge in the form of market orientation visions will thereby promote the development of procedures in tacit knowledge. One can therefore assume that the company's shared market orientation visions will have a positive impact on the company's amount of tacit knowledge, which affects the competitiveness.



H2a: Shared market orientation visions have a positive effect on market orientation efficiency

H2b: Shared market orientation visions have a positive effect on market orientation scope

H2c: Shared market orientation visions have a positive effect on market orientation competitiveness

Commitment to learning

Central to organizational learning is the fundamental value the organization puts on learning. This value affects whether an organization will have a learning culture within the organization. If an organization puts little value on learning, little learning will occur (Smith 1985); hence the commitment to learning is one of the goals within the *intensity* of learning. Commitment to learning is related to Senge's (1990) discussion of learning principles (i.e. the value of learning activities are seen as immediately obvious). Tobin (1993) looks at the

circumstances surrounding the organization's ability to think and reason is a matter of course for the organization. Crows and Heijden (1992) assume that "cultural compliance to learning" is a prerequisite for its ability to improve their understanding of the environment over time. Shaw and Dennis (1991) maintain that effective learning companies are reflective, meaning that they must appreciate the need to understand the causes and effects of their actions.

Market learning is not privileged for the leadership group or marketing function. It occurs all over the company, when employees come in contact with customers, service people solve problems, or sales persons listening to the distributor's complaints (Day 1991). Market learning is thus the company's responsibility. For example, a company's attention to the commitment to learning means that the employees are aware that improvements in the learning process often happens based on knowledge or practice outside their own industry.

The learning dimension of market orientation has repeatedly pointed out the importance of the employees to learn and I have described how to promote this learning. The cultural factors must be viewed as ’glue’ that holds the organization together. However, it helps little to have a shared vision about the importance of market orientation or the employee’s ability to unlearn existing knowledge and absorb new knowledge if the company does not have the will to invest in learning. In other words, one must have a *motivation* that goes on the employees' willingness to invest in learning. This will guide the company's energy in the same direction and it will forward the important shared commitment that is necessary for the organization to evolve into a market-oriented company that has as a core element to learn from the market. Commitment to learning is therefore eager to promote the employees' acceptance and identification with the company's overall goals and to internalize

them with their own attitudes and cognitive preferences (Kamoche and Mueller 1998: 1050).

First, I predict that commitment to learning positively affects market orientation efficiency. According to DeGus (1988), an organizations' ability to learn about changes in the marketplace is the main basis for the development of future competitive advantage against competitors. When the goal of an organization is to continually learn from the market, the corporate culture includes a commitment to this learning. One should therefore be able to identify a "cultural compliance to learning" within these organizations since the organization assumes and role as a learning organization. Otherwise, if an organization does not emphasize learning, little learning will occur (Smith 1985). Commitment to learning thus affects the intensity to learn, and the greater the commitment the organization puts on learning, the more will the company learn about the market.

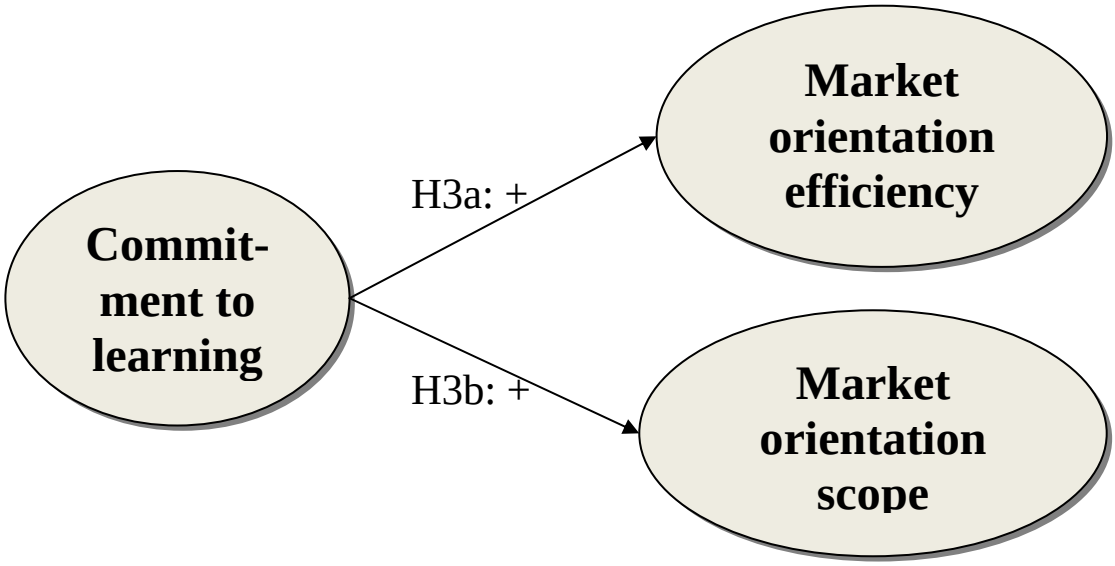
In relation to the impact that commitment to learning has on the strategic capabilities of the market-oriented companies, a commitment to learning will lead to the capabilities to increase in strength. The greater the commitment to learning a company emphases, the more learning they achieve, and the more able to be market-oriented. Commitment to learning deals with all employees at all levels of the organization, and will stimulate the learning that occurs throughout the organization. One can therefore assume a link between commitment to learning and the market orientation activities (Weick 1976). The same effect occurs in the case where managers take into account the received market intelligence in their decision making. This will signal and motivate the employees to maintain and develop the intelligence system.

A type of learning effect that market-driven companies achieve is the improvement in efficiency and time it takes for the company to respond to opportunities and threats in the market (Slater and Narver 1995). Commitment

to learning should be seen as immediately obvious from the employees and by management, and the learning effect that has been achieves will result in employees that actively search for new ways to carry out the intelligence activities. Thus, it can encourage organizations to consider new ways to implement the market orientation activities. When employees feel a commitment to learning, they will develop processes that are consistent with the external (newly developed) conditions. This dynamic development of the implementation of market orientation activities can thus be seen as one of the results from the employees' commitment to learning and process improvement (Smith 1985).

Second, commitment to learning positively affects market orientation scope. Commitment to learning affects the employees to, by their own initiative, search for new sources of intelligence in the market. Thus they will be in a better position to discover the new trends and developments that occur. The market orientation scope concerns the ability to discover new markets and trends at a lower expense and lower risk of failure. Here one expect a positive relationship to the commitment to learning because employees initiative will result in the discovery of new intelligence sources and this will increase and enhance their market knowledge. Thus, this relationship supports the dynamic development of knowledge in the company, being a company where all employees at all levels are made responsible for their own learning (Shaw and Dennis 1991). If management recognizes this value, it will be an important signal to the rest of the organization (Kohli and Jaworski 1990).

Finally, I do not expect commitment to learning to affect market orientation competitiveness. This is because the latter is about tacit knowledge, a knowledge that is crated through automated internal processes, in opposition to commitment to learning which is about the motivation to active quest for intelligence from new sources and market knowledge on the basis of the intelligence. Therefore, this effect is omitted in the model.



H3a: Commitment to learning has a positive effect on market orientation efficiency

H3b: Commitment to learning has a positive effect on market orientation scope

Open mind

Mental models, basic assumptions about how the world works, restrict us to think and act they way that we always do (Day 1994a). Success and failure of the past supports the design of new mental models explaining how the marketplace works (Levinthal 1992). As time goes on, these models will not be significant, but may still be operative if an organization lack an open mind to question them (Day 1994a). In this context, open mind is linked to the property 'unlearning' (Huber 1991). Hedberg (1981) describes how relearning should be related to learning within organizations. He claims that a …*understanding environment that changes requires tearing down obsolete mental maps and starting anew. Organizations which encounter environmental discontinuities that threaten their survival or which discover new environmental niches may*

have to unlearn old behaviors and learn new ones (Hedberg 1981: 4). Huber (1991) has a direct description of this willingness to discard established knowledge and the willingness to establish new learning as unlearning. Unlearning is thus at the heart of the organization's change from the existence of an open mind in an organization which enables new learning to happen.

Unlearning enables new responses and mental maps, and organization's capacity to unlearn old habits and worldviews and to relearn when encountering new situations vary between organizations (Hedberg 1981). The importance of an open mind in organizations can be illustrated through how the front staff at a hotel handles complaints regarding lack of guest service. The front staff might interpret this situation to be unpleasant response that should be overheard, or otherwise, this type of information should be disseminated within the organization as opportunities which the hotel should investigate. The attitude to the development of new mental map is displayed here by the desire to change the environment or to change the organization. This can also be supported by developed incentive systems to support intelligence gathering so that the intelligence supplied does not disappear in a 'black hole' (Day 1991: 4).

For the organization to develop their mental models, they must seek intelligence from sources which captures new trends, and not seek to confirm what is already known (Day 1991; Day 1994a). This is an important point in that all leaders can be said to apply intelligence in greater or lesser extent. It is, however, the manager's ability and willingness to seek intelligence that gives new impulses, which will provide as a basis for the company to be able to develop in other directions than the standard within the industry. By having an open mind to market trends and market development, companies have the greatest chance to be the first to detect changes in customer preferences and market conditions (Dickson 1992). It is therefore important that the market intelligence is not used as a confirmation of executed decisions (Day 1994), but as the mapping of

intelligence about new conditions. Furthermore, the continuous experimentation of new ways to satisfy the market is a source of intelligence regarding an understanding that the existing market operations might not be the most appropriate.

In order to stimulate the company's ability to be market-oriented in a constant dynamic evolving market (Dickson 1992), the company must search for information beyond the existing boundaries (March 1991). This ability does not occur at its own, but must be actively processed in order to be effective. According to learning theories, organizations will seek to retain the existing and streamline the familiar routines (Huber 1991). In order for dynamic development to occur, the organizational culture should be aware of the commitment of the value of new habits, routines, procedures and knowledge. Since a learning organization is open to trends and events that provide market opportunities, service personnel will not be upset because their planned implementation plan will be sidelined on the basis of customers' request for changes.

Resistance might occur when one seek to implement a dynamic market orientation because change is often seen as difficult for individuals in the organization and the organization itself (Shapiro 1988). Therefore, business must possess the ability to discard existing knowledge and bring in new - they must have an open mind that allows for accepting new knowledge. This form of unlearning can be painful but necessary in a learning organization … t*he first step to learning is to challenge those ways of thinking that worked so well in the past* (McGill and Slocum 1993: 67). In other words, this is not a process that is self-reinforcing, but company leaders must actively promote it.

Day (1994a) has developed five elements that combine open-mind towards the capacity to capture new market intelligence;
a) seek sources of intelligence that captures the latest trends and not those that only confirms what is already known,
b) purchase of market intelligence for decision purposes and not to confirm the already preferred decisions,
c) capture and listen to intelligence from the company's sources of which are in direct contact with customer,
d) benchmarking beyond the obvious by also studying the values, attitudes and management processes to the competition,
e) encourage continuous experimentation.

An open mind will affect the learning process in the market-oriented companies through acquiring intelligence beyond the ordinary, and the company's attitude to-try-and fail will encourage the members to expand their view of intelligence sources. The learning process under an open mind will lead to enhanced ability to both discover new market opportunities and new customer segments, and to perform market orientation activities in new and improved way.

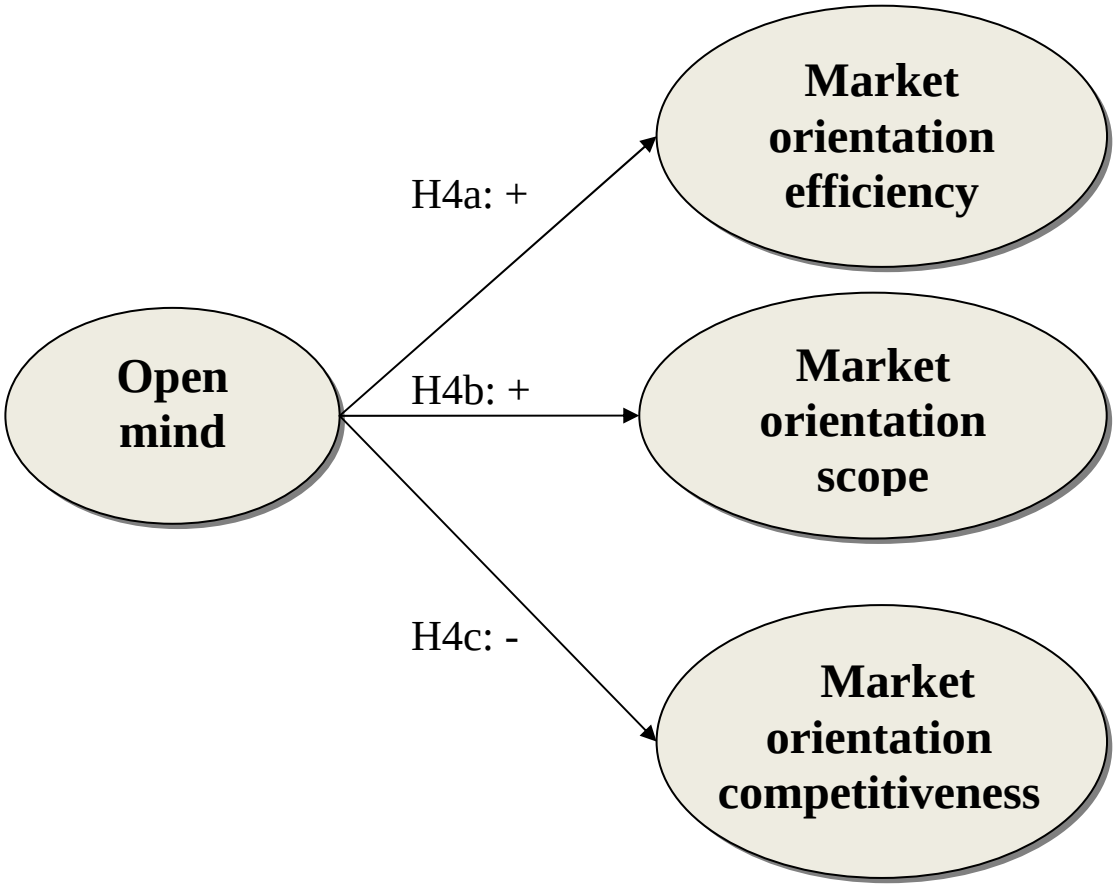
I predict that an open mind positively affects the market orientation efficiency. Open mind is about the company's willingness to discard established knowledge and absorb new knowledge. In the organizational learning literature, this was defined to the same as unlearning (Huber 1991). Unlearning is required for the organization to evolve in line with the market development, and this facilitates a proactive rather than a reactive knowledge developed in the organization.

Market orientation intelligence efficiency is a description on how well the market orientation activities are conducted. The multiplicatively in the syndrome describes a connection where the level of the activities reciprocal effect is included. If a company operates with a low level of one of the activities, for

example low dissemination of market intelligence, the business must have the ability and opportunity to change it. This ability and opportunity are contingent with the company's ability to discard the established routines and behaviors so that they can adopt practices that are more appropriate to implement market orientation intelligence (Hedberg 1981). Thus the company's degree of open-mindedness has a positive impact on market orientation intelligence efficiency.

Secondly, open mind positively affects the market orientation scope. The impact will be on the necessary unlearning for the company to develop an ability to discover new markets (Dickson 1992). This is not only about new market segments within the same industry, but also new areas where the company has future potentials. For an organization to develop their mental models, they must strive to seek intelligence from sources that captures new trends (Day 1991; Day 1994a). The discovery of new markets is not contingent on rejecting the existence of existing markets, but rather the ability to think beyond the existing lines. This ongoing development means that the company is dependent on having the ability to identify new patterns and structures, which an open mind enables. Thus one can assume that an open mind will affect the company's ability to discover new markets.

Thirdly, open mind negatively relates to market orientation competitiveness. Market orientation competitiveness concerns whether the company's degree of open mind has an impact on the organizations development of tacit knowledge. An open mind enhances the capacity to think in new ways in the old situation, while tacit knowledge is about take advantage of established familiar routines. Nelson (1991) describes how one seeks to maintain the existing and then take it for granted. Hedberg (1981) showed how one seeks to avoid new ways of doing things. On the basis this, I predict that an open mind negatively affects tacit knowledge.



H4a: Open mind has a positive effect on market orientation efficiency

H4b: Open mind has a positive effect on market orientation scope

H4c: Open mind has a negative effect on market orientation competitiveness

Knowledge level

Knowledge acquisition consists of the process where intelligence and knowledge are made available for further processing. First, the concept to "make available" means that organizations may have its own memory despite the fact that organizations had no "brain" as including synergies from the contacts between employees and departments (Cyert and March 1963). This can lead to different knowledge compared to intelligence which relates to a single member or entity (Huber 1991). Thus, the storage of knowledge in the organization's memory might be a means for the organization to make intelligence and

knowledge available for further processing (Day 1994a). One can assume that by accepting that knowledge can be stored in the organization's memory, one accept that the organizations have special knowledge that is not necessarily identical with the sum of individual knowledge (Senge 1990). Huber (1991) defined organizations to store the organization's knowledge. Moorman and Miner (1997) defined organizational memory to be the collective wisdom of an organization which includes theories in use, shared mental models, intelligence databases, formalized procedures and routines, and formal cultural browser that guide behavior.

Assuming that organizational knowledge exists and that it can be saved for future processing, the task is to look at how this knowledge is established and developed. Cognitive learning occurs when one interprets information and interpret it (Huber 1991), that is developing knowledge. Knowledge thus consists of cognitive structures that may have been developed in different ways. Huber (1991) has a description of five different learning processes for knowledge and intelligence acquisition; (1) congenital learning, (2) experience-based learning, (3) vicarious learning, (4) transfer, and (5) searching.

Huber (1991: 128) proposes that... *an organization's congenital knowledge is a combination of the knowledge inherited at its conception and the additional knowledge acquired prior to its birth*. This include, among other things, how the founders of the organization and the knowledge of the start time influence the type of intelligence the organization searching for in the future. However, there is a time aspect here that "dilutes" these restrictions over time (Huber 1991). The second type of learning process is experience-based learning (see Levinthal and March 1993; Sitkin 1996). This learning occurs as a consequence of the trying and failing method, and the feedback one received on the various trials. Action research falls into this type of learning. The third type of learning is vicarious learning. New knowledge happens when an organization looks at other

organizations, like those so-called "successful". It goes without saying that this type of learning must be used with great caution as this type of learning does not take into account the company's own resources and expertise to strengthen their competitive advantage. The fourth type of learning is the transmission. This is a type of learning that organizations use in cases where they do not have their own knowledge of the area and for example, choose to acquire this knowledge through entering into collaborative projects. The last learning comes from tuning and monitoring. The search might be routine or for a particular purpose, it can be applied in the external environment, it can be focused or general and it can consist of internal profitability monitoring.

It is shown that learning can occur in different ways in organizations and as a consequence, organizations have different organizational knowledge. Put another way, this indicates that organizations may have both different content and different levels of their knowledge. A market-oriented company leads the organization into having a focus on potential customers and competitors. The consequences of this intelligence focusing on the market will be that much of the intelligence processed in the company focuses on proactive intelligence on trends and developments in the market. This will affect the nature of the organizational knowledge which the market-oriented companies obtain. Newly established companies will have a lesser amount of organizational knowledge than older companies (Barney 1991), while the older companies will have different levels of knowledge according to whether the organization has placed emphasis on learning (Sinkula, Barker and Nordewier 1997). An important determinator for the organization's ability to learn will therefore depend on the organization's existing level of knowledge. The more an organization knows, the more capable it will be to understand which intelligence is important and what intelligence should be discarded.

When it comes to the level of organizational knowledge, one can discuss this in accordance with Cohen and Levitahl's (1990) concept of absorbing capacity, and Moorman and Miner's (1997) memory level. Cohen and Levintahl (1990) defines absorbing capacity to be …*the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends.*… ((Cohen and Levintahl 1990: 128). They thereby determinate it to be a function of the company's current level of related knowledge. The absorbing capacity is used as a measure of a process that consists of the sum of the ability to interpret intelligence from various areas (e.g. most recent scientific or technological developments in a given field, the ability to evaluate and use outside knowledge). Moorman and Miner (1997) defines organizational memory to include … *memory level refers to the amount of stored information or experience an organization has about a particular phenomena* (Moorman and Miner 1997: 103). The definition of Moorman and Miner (1997) captures the purpose of the concept, that is, to be able to distinguish knowledge levels between organizations. Cohen and Levitahl's (1990) definition is somewhat inaccurate in that it does not distinguish between the knowledge, the interpretation and the implementation capability. This latter experience-based knowledge is tasks that have been used as a measure of the company's ability to implement market orientation activities in relation to the experience they have on market orientation; with other word market orientation as a syndrome.

Most organizations do not know what they know (Day 1994a). They may have good systems to store and locate the 'real' computer systems for accounting and sales data, but otherwise they will have problems to locate where the various parts of the intelligence is known within organizations or to gather all intelligence in one place. When IBM in the early 90's was forced to clean up its own list of collect competitor intelligence, they found that 49 departments in 27 organizations studied the same competition without sharing the data. Literally, hundreds of people analyzed the same data, but they were not aware of what

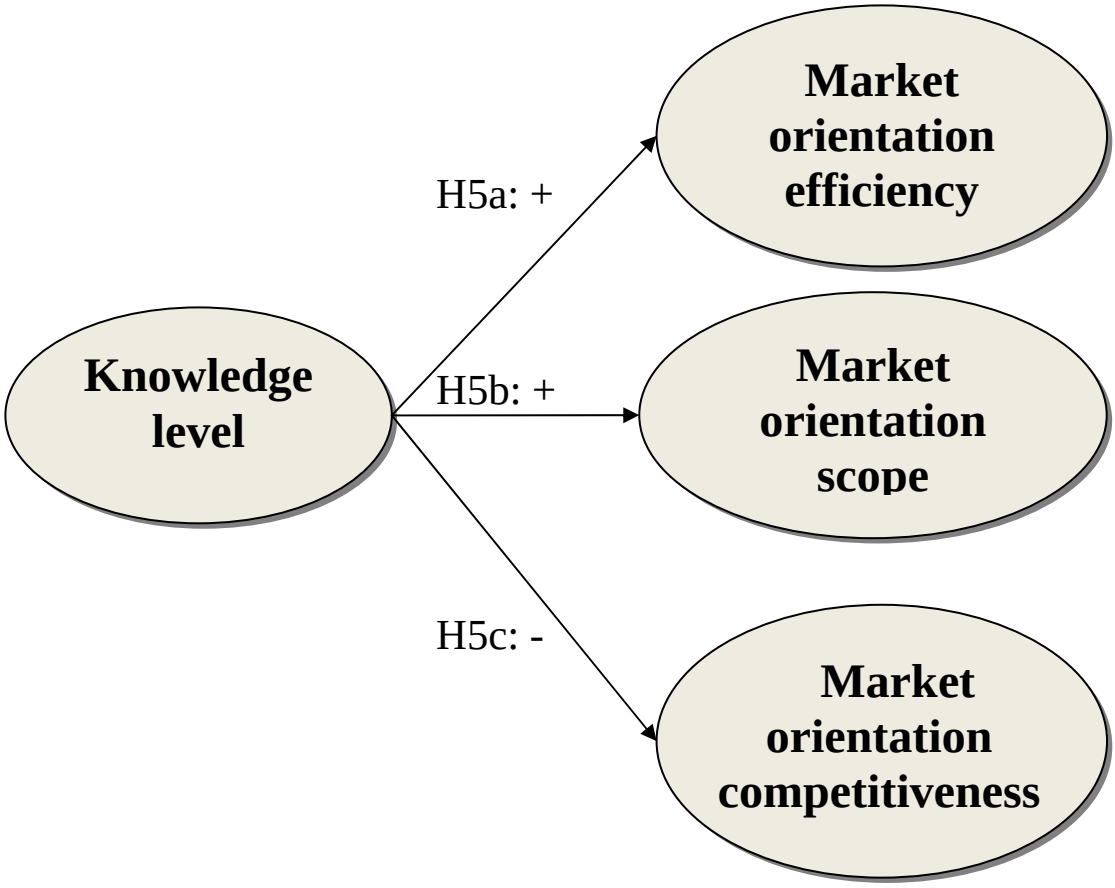
others were up to, or shared their knowledge with others because the intelligence was stored in local databases and files. Market driven enquiries and interpretations will be wasted if the knowledge which is formed from the experience are not made available on the collective memory (Day 1994a: 22). Organizations without a practical mechanism to 'remember' what worked and why, will repeat the mistakes and re-discover the success factors again and again. Memory mechanisms are therefore necessary to ensure that valuable experience will be captured, stored, and can be recalled when necessary.

To relate knowledge to the market orientation intelligence, market orientation as a syndrome must change to be able to identify a change in knowledge level (Moorman and Miner 1997). The core behind the market-orientation intelligence is about the ability to implement the market orientation activities, and the higher level of knowledge the company has regarding the market orientation, the better they will be on gathering, disseminating and reacting to market intelligence. This is because these companies will know which intelligence that is important, where it exists, who needs it, and the consequence and importance of the intelligence on decision-making. Therefore, one can assume a positive effect from the knowledge level of market orientation intelligence efficiency.

Second, knowledge level positively affects market orientation scope. A company's knowledge level impacts market orientation scope, the more knowledge an organization has regarding its environment and markets, the better they will be on interpreting what happens and predict changes to come (Sinkula 1994; Day 1994a). Another factor here is that the knowledge level might affect the organizations ability to understand the consequences of focusing on emerging markets (March 1991). Thus, an organization with high levels of knowledge also possess inside knowledge that tells them why it is important to focus on new markets (Dickson 1992). The knowledge level within the organization is therefore assumed to have a positive effect on the company's

ability to interpret and analyze new markets and thereby increase the scope of the market segment in focus.

Knowledge level is predicted to negatively affect market orientation competitiveness. Knowledge level affects the explicit knowledge within the organization. The tacit knowledge of market orientation is about the employees learned routines which can not be redistributed, written, or taught formally (Moorman and Miner 1997). Therefore, tacit knowledge is learned through experience (Huber 1991), while the knowledge level captures the formal qualifications which can be coded and written down. Therefore, I expect the knowledge level to decrease the organizations level of tacit knowledge.



H5a: Knowledge level has a positive effect on market orientation efficiency
H5b: Knowledge level has a positive effect on market orientation scope
H5c: Knowledge level has a negative effect on market orientation competitiveness

Market based incentives

When human resources are guided through the assumption that customer satisfaction is both a cause and a consequence of employee satisfaction, the company's key leaders will become market-oriented (Kohli and Jaworski 1990). Rewards are based on measurable improvements in customer satisfaction, and the employees will be able to resolve customer problems without seeking help from others. This view is based on a customer problem-solution skills and expertise (Day 1994b), and is supported by Hedberg (1981) who points out *…learners who encounter certain stimuli frequently or who receive important rewards for mastering situations, enrich their knowledge and move towards higher levels of integrative complexity and so improve their maps of the environments and improve their responses to stimuli* (Hedberg 1981: 7). Also Kogut and Zander (1996: 515) points out how people are bound to what they know and what they value, and that they are sensitive to the norms of desirable behavior. Incentives are in this context important symbol to influence the organizational and economic behavior.

Webster (1988: 38) argues that the key to developing a market-driven, customer-oriented company depends on how managers are evaluated and rewarded. He observes that if managers are evaluated primarily on the basis of short-term profitability and sales, they have a tendency to focus on these criteria and neglect market factors such as customer satisfaction, which ensures long-term health of an organization. Webster's (1988) observations are supported by Kohli and Jaworski (1990) study of market orientation. Thus one can assume that individuals in the organization that emphasizes customer satisfaction and market-oriented behavior as the basis for administrative reward will more willingly gather intelligence, disseminate this internally and be responsible in response to market needs (Jaworski and Kohli 1993).

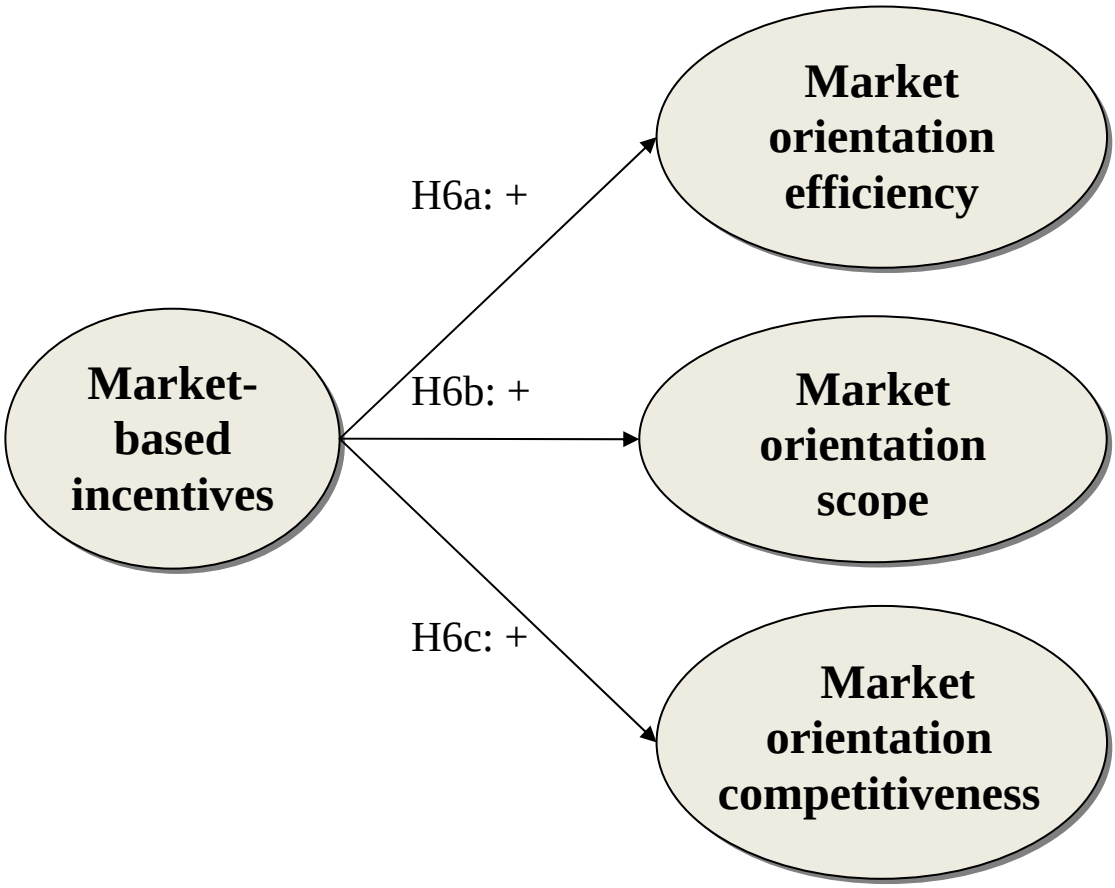
Therefore, market based incentives positively affects market orientation efficiency. Hedberg (1981) demonstrated how people can be led into the desired behavior through the supply of stimuli, or through a system that rewards behavior. Incentives are important symbols that affect organizational and economic behavior (Kogut and Zander 1996: 515). This relationship is enhanced by people's self-interest seeking, since the employees will be motivated to follow the direction of the incentives.

The incentives will act as a driver for process implementation. This is because it guides the employees with a motivation to see the usefulness of the market orientation activities (Hedberg 1981). Moreover, market-based incentives will be long-term, a condition that are necessary to create the establishment around the desire to learn. Thus one can assume that market-based incentives have a positive effect on market orientation intelligence efficiency.

I predict that market based incentives positively affects market orientation scope. This is because market-based incentives direct motivation toward long-term vision and courage employees to focus the intelligence on market developments (Kohli and Jaworski 1990; Narver and Slater 1990). Thus the quest for new markets and new sources of intelligence is encouraged, and because short-term inappropriate gains are not being rewarded, it will not be a priority.

Finally, market based incentives positively affects market orientation competitiveness. Market-based incentive systems affect the tacit knowledge in the organizations. The rationale is that it creates a culture towards successful solutions, and the incentives motivate the employees to continue this behavior. As a result, market-based incentives increase organizations maintenance of market orientation. Maintenance of behavior over time leads to the creation of

routing, and these procedures are thus lead to an increased commitment to market solutions that are in line with customers' satisfaction.



H6a: Market-based incentives have a positive effect on market orientation efficiency

H6b: Market-based incentives have a positive effect on market orientation scope

H6c: Market-based incentives have a positive effect on market orientation competitiveness

Employee turnover

Knowledge between employees can be transferred through the learned rules and procedures (Nelson 1991). But when people interact in small groups, they develop their own implicit rules and procedures that can not formally be

expressed (Kogut and Zander 1992), and we have a problem when employees enter and exists the organization.

Organizational turnover happen when members quit and are replaced by new personnel (Simon 1991). A perception of the employees turnover is that organizations will lose the knowledge and experience of those who quit, but at the same time gets access to new knowledge from the one that takes over the position (March 1991). Experience is a function of the individual's position within the organization, the relationship between the individuals (Cohen 1994). Organizations with different structure (see Galer and van der Heijden 1992 for an overview of the structure and organizational learning) should experience different opportunity to learn. Because the turnover of employees affects the balance and the location of the experience within an organization, turnover will affect the organization's ability to learn and thereby affect the performance (Carley 1992).

In this study, however, I focus on the learning processes and not the learning activity's implementation (see Sinkula 1994 and Simon 1991). Therefore, the structure of the organizations will not be evaluated. Earlier it was mentioned that the purpose of a learning organization is to be able to capture new trends and market development (Dickson 1992). Simon (1991) have examined how employee turnover affects the organization's innovation capability, and identified a number of factors. First, turnover is considered as a barrier to innovation due to increased training costs. Increased training costs bind resources, and since resources always will be a key factor, the resources must be collected from other areas within the company. Moreover, the employee turnover has a negative effect on rationalization within the companies because socialization of new members takes time (March 1991). Secondly, turnover also has a positive effect on companies' ability to innovate (Simon 1991: 180). The reason for this is that strict organizational routines are broken up and replaced

by new impulses that lead to changing the implementation methods and objectives.

Another aspect of employee turnover will be its direct effect on the organization's memory. High amount of employee turnover is likely to have a negative impact on the organizations' long-term memory (Jablines 1984; Simon 1991: 179). The reason for this is that there are few tasks and procedures which are formally written down on paper. Moreover, the socialization factor of new employees will affect the learning conditions. If the business is trained to take care of these new employees, they will quickly become socialized into their new roles (Senge 1990). Thus, they will be able to perform their tasks faster, and be parts of the organization's learning culture. This relationship is found in companies characterized by large seasonal fluctuations. In all, one can conclude that, depending on the company's ability to introduce new employees into the organization's behaviors, new employees will have a positive effect on the company's market orientation through the supply of new knowledge and new ideas, so that established ineffective ways to carry out activities is replaced. New employees might also have a negative side since it hampers established procedures (March 1991).

I predict that turnover positively affects market orientation efficiency. The training of knowledge and intelligence requires repeated interaction within small groups, often through the development of a unique language or code. Parts of the knowledge of a group are simply to know the intelligence source of who that knows. But it also consists of organized activities (Kogut and Zander 1992: 389). Turnover of employees creates organizational limitation to the intelligence process (Levinthal and March 1993). At the same time, turnover among the top managers increases the likelihood of strategic reorientation (Lant, Milliken and Batra 1992). In other words, we gain new access to knowledge that opens up new ways to define both the existing organizational practices and access to new

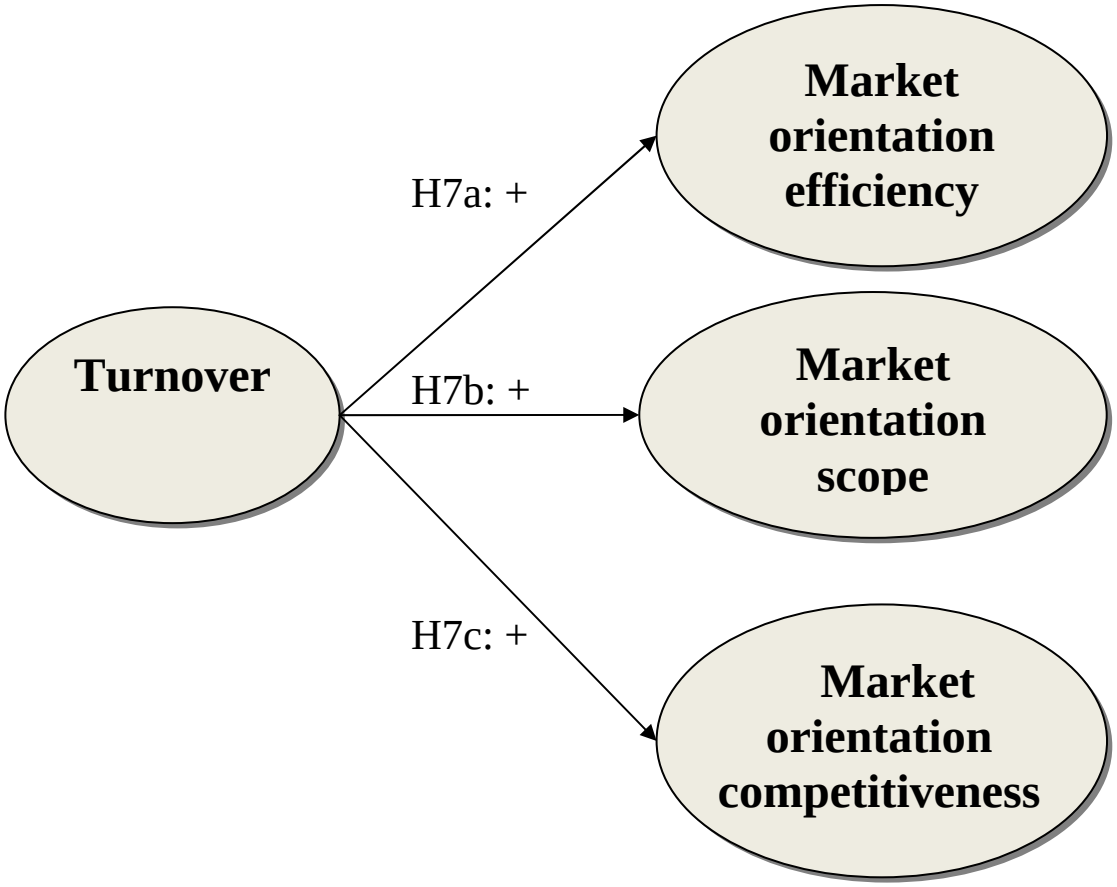
knowledge about the market. At the same time the turnover of employees cost business resources in training costs.

For the execution of market-orientation intelligence, turnover among employees will break existing routines in executing market orientation tasks (Simon 1991). This may have both positive and negative effects. For the negative effects this means that new employees need some training time before they can contribute to the production of value for the company. However, the focus here is on the intelligence activities, and I expect that the new employees will have a positive effect through the above-mentioned supply of new knowledge and new ways that increase the effectiveness of the activities. Simon (1991) also shows how the high turnover of employees has a negative effect on the organization's long-term memory, but one can assume that this effect is not strongly reflected in the market-oriented businesses because of their continuous intelligence processing which constantly generates new knowledge.

Turnover positively affects market orientation scope. Turnover breaks existing procedures, for example, the existing ways of defining market segments, and new and more effective procedures and policies have the potential to be introduced. This increases the likelihood that one discovers new markets (Simon 1991). On this basis, one can assume that turnover leads to increased opportunities for increasing the scope of the market area.

I predict that turnover negatively affects market orientation competitiveness. For the maintenance of tacit knowledge to new employees there exists an increased need for training and rapid socialization of the organizational practices (Simon 1991). The network and support functions that are established to protect these factors will affect how quickly the new employees are part of the organization's routines (March 1991, Kogut and Zander 1992). However, one can assume that the new employees will have a negative effect on the tacit knowledge the

organization has developed over time, although this effect will diminish depending on how quickly they become part of the routine. Therefore, since tacit knowledge consists of the establishment of rules and procedures, new employees can have a negative impact on the establishment of procedures because the new employees first must be socialized (March 1991). On the basis of this, I assume that turnover of employees will have a negative effect on market orientation tacit knowledge.



H7a: Turnover has a positive effect on market orientation efficiency

H7b: Turnover has a positive effect on market orientation scope

H7c: Turnover has a negative effect on market orientation competitiveness

3.3 Hypotheses: effect of market orientation capabilities

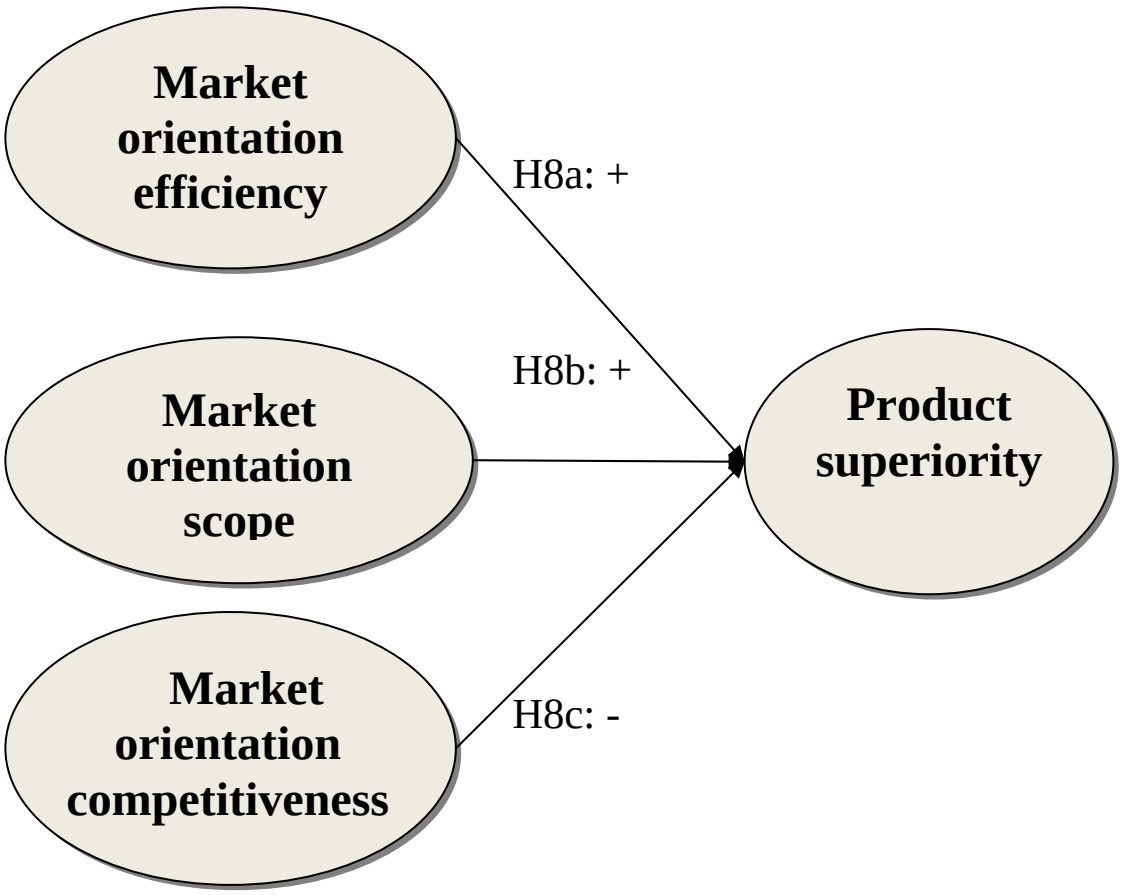
Product superiority

Product superiority captures the company's ability to adapt products to the market. This ability is dependent on the intelligence the company has about the market, the greater the ability to customize the product (Cooper 1994).

I predict that the market orientation efficiency positively affects product superiority. One can assume that a tight coupling of the market orientation activities has a positive effect on product customization. The rationale is that the market orientation processing generates market knowledge, which enables the company to make more informed decisions.

Also, market orientation scope positively affects product superiority. This is through the company’s increased ability to detect and interpret new conditions in the market, and an increased capability to search for new opportunities for existing products.

Market orientation competitiveness negatively affects product superiority. This is because the tacit knowledge in market orientation includes a 'static' element, meaning that it seeks to preserve the existing procedures of the organization for the pursuit of an effective market orientation implementation. Market orientation tacit knowledge is important because it represents the market orientation as a competitive advantage, in that the orientation is not easily copied by competitors. However, it can be an obstacle in product customization through its inability to be dynamic. Thus a negative effect is assumed between market orientation competitiveness and product customization.



H8a: Market orientation efficiently has a positive effect on product superiority

H8b: Market orientation scope has a positive effect on product superiority

H8c: Market orientation competitiveness has a negative effect on product superiority

Chapter 4. Methodology

This chapter will explain the methodological choices that are taken for the testing the research model. The chapter is organized as follows: First is the choice of the design is described, followed by the choice of setting. Then I discuss the operationalization of the concepts, and finally the data collection is described.

4.1 Design

It is the characteristic of the study that determines the choice of design. The theme of this study is to identify and test factors that stimulate the market orientation learning process. The research model consists of seven exogenous process variables that promote learning, three market orientation capabilities as mediating variables, and one endogenous variable. The aim of the test is to identify the proposed causality between these causes - effect variables with the purpose to identify the market orientation learning (which results from the micro-processing; being the value process, the knowledge process, and the behavioral process). The choice of design affects the ability to test the concept by the fact that the different design types provide different access to information. This information will then affect the ability to draw inference about causality through the three terms of isolation, covariance and temporal ordering (Hunt 1991; Frankfort-Nachmias and Nachmias 1996; Bollen 1989). Churchill (1995) claims that the experimental design is unparalleled when it comes to proving causality. Despite this, the first overall decision consist of a balance between what is necessary amount of information in relation to the characteristics of the study in order to draw inference about causality, against a trade-off related to what may be considered appropriate use of resources.

There are three characteristics of this study that guides this choice. First, the study consists of constructs which requires both training and have a time aspect. For example, the construct commitment to learning is assumed to have a positive effect on behavior change in the market orientation implementation. An experimental manipulation of this commitment requires a complex effort from the management. A change in the level of the study's exogenous variables is therefore difficult to implement in an experimental design.

Second, one of the reasons for the existence of companies with different degrees of market orientation is because of the time it takes to implement the orientation (Slater and Narver 1994). This study aims to identify determinants that affect the company's ability to accomplish carry out the learning process of market orientation, and a design that measures the effects before and after the effort for implementation is clearly preferable from the temporal ordering requirement (Hunt 1991). However, the implementation of determinants is time-dependent, and this makes it difficult to manipulate both from a practical and a resource based point of view.

The third factor which affects the choice of design is the number of constructs within the research model. To be able to test the effects, we would need a large number of manipulations within the experiment. An experimental design requires a correspondingly high number of groups of experimental and control groups. Since this study consists of a theoretical model with seven exogenous latent variables and four endogenous latent variables, the complexity exceeds the positive effects which an experiment would bring in.

Based on the above discussion, this study implements a cross-sectional design with one data collection. There are a number of precautions that have been taken to facilitate the causality criteria for this type of design. The isolation criterion is

reduced in a survey design because we have less control over other factors that influence the endogenous variables. To handle this problem I have selected a homogeneous setting to isolate out the effect of external variables.

The covariation criteria (a change X must always be followed up by a significant change in Y) are reduced in a survey design because one can not verify whether the expected effect is attributed to the manipulation variables (Frankfort-Nachmias and Nachmias 1996: 101). One way to reduce this weakness is to increase the number of respondents in the survey. By using large amounts of data points, the relation between X and Y can be used with adequate safety to assume correlation (although one cannot imply causality). Variability is achieved by measuring the constructs at an ordinal- or interval level. Such variation in the independent variables is necessary to test for covariation. Using a cross-sectional design facilitates this variation, and it is assumed that the different levels of learning, as in market orientation, therefore vary within the industry.

The criterion of temporal ordering (the cause of X must occur before Y in time) is within the cross-sectional design ensured by leaning on theoretical rationale and logic, as well as previous empirical findings (Hunt 1991). Temporal ordering in a survey design can be facilitated by panel or time series studies (Cook and Campbell 1979). This is however at the expense of the isolation criterion because we can not control the impact the respondent gets from external sources.

4.2 Setting

On the basis of the choice of cross-sectional study, the isolation criterion is facilitated by a homogeneous setting so that, optimally, we have variation only within the studied factors (Cook and Campbell 1979). The setting must also, due

to the covariation criteria, cover the width of the phenomenon to satisfy the necessary amount of data points.

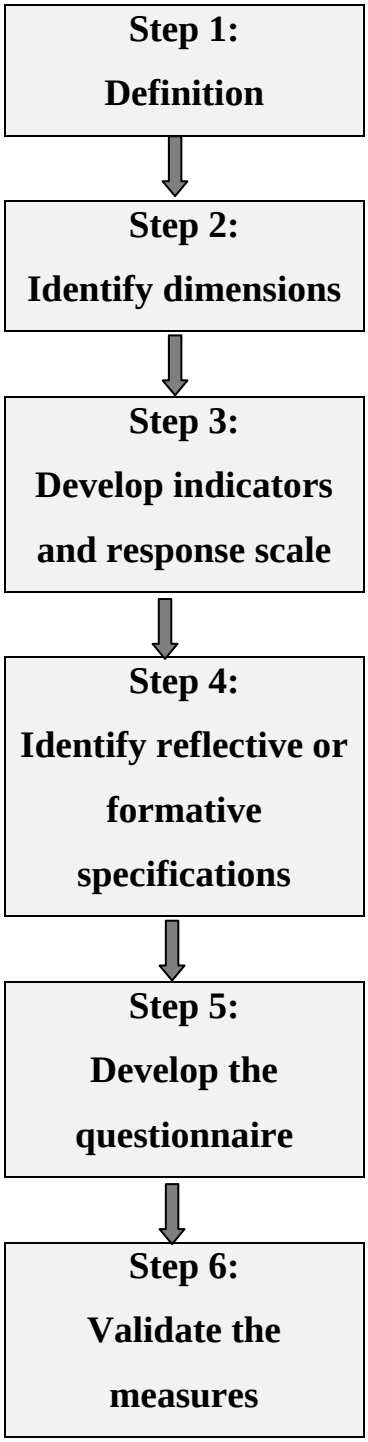
I choose the hotel industry as the setting for this study. Hotels vary with regarding to location, from the most central city hotels to hotels at the countryside, and by including different types of hotels in the sample the variation is due to differences between the hotels and not because of the external competitive situations. Thus, by using one industry, I search to reduce the error and strengthen the validity of the statistical analysis.

Descriptive data that describes the hotel industry mainly focuses on hotel statistics, such as guest nights by purpose and by nationality, and the general accommodation sales, regardless of who's financing the stay (private/ work). The data shows that the average labor cost in the hotel and tourism industry is 221 thousand Norwegian kroner per person, while a comparison of construction and building industry is 290 thousand Norwegian kroner. Labor cost measures company's costs per employee, identified through salaries, social expenses and payroll tax. In other words, it does not describe personnel costs in relation to total costs and earnings. Training costs per employee are approximately 2.300 Norwegian kroner in the hotel-tourism industry, while it is approximately 9.900 Norwegian kroner in the mining industry (Statistics Norway). The hotel industry has substantially lower investments in employees in the form of training and welfare. This affects the variation in this industry regarding the knowledge level and the hotels strategic and operational implementation. Hotels vary with regard to the level of formal knowledge among their employees. Variation in the formal training will most probably affect the amount of market learning within hotels where low formal knowledge would negatively affect the proactive learning processes related to market changes. Therefore, the setting satisfies variation within the constructs in the research models. Other factors that may facilitate

internal variability is the organizational system of the hotels; ranging from integrated chains to independent hotels.

4.3 Developing measures

Measurement refers to quantifying the latent variables in relation to their definition. In this study I lean on Bollen (1989), who have developed a procedure for measurement development consisting of six steps. The first step is to clarify a constructs meaning in relation to relevant literature and previous definitions of the construct. The second step in the measurement development is to map the different aspects of the construct to identify its dimensions. This forms the basis for the operationalization of the concepts. In this study the conceptual definition and their respective dimensions is discussed chapter 3. The operationalization of the concepts bases on existing studies that have developed and validated scales for the corresponding concept (Churchill 1979). Bollen's (1989) third step in the measurement development process consists of developing indicators and response scale. The fourth phase in Bollens (1989) measurement development process consist of the specification of the relationships of the latent variables, i.e. the specification of whether the objectives are reflective or formative in the description of the latent variable (Bollen and Lennox 1991). In this study this specification is included in the operationalization step.



Operationalization

The following section discusses the operationalization of the concepts. The research model consists of a two-stage model with endogenous and exogenous variables. The endogenous variables consist of market orientation efficiency, market orientation scope, market orientation competitiveness, as well as product

superiority. Of these, market orientation efficiency is measured through three dimensions that represent the reciprocal performance of the market orientation activities. The exogenous variables consist of seven constructs. This is the shared visions, shared market orientation visions, commitment to learning, open mind, knowledge level, market-based incentives, and turnover of employees. Thus, the theoretical model consists of gamma and beta relations.

Endogenous factors

The market orientation capabilities are divided into market orientation efficiency, market orientation scope, and market orientation competitiveness.

Market orientation efficiency is defined as the organizational gathering of market intelligence mainly related to the product-service market, linked to current and prospective customers' adoption criteria, the current and future competitors' current and future market behavior, along with the spread of intelligence between departments, and organization wide response to it (Kohli and Jaworski 1990). The concept of market orientation efficiency has three dimensions, being intelligence gathering, intelligence dissemination and response intelligence, each of which has formative measures. The reason is that there are, for example, many different ways to collect intelligence which not necessary correlate with each other. The concepts is operationalized and validated previously, and to use this earlier validation of the concept I will use a synthesis of the measures, thereby I can obtain the same construct validity but with the use of fewer item. The starting point is the measurements scale developed by Jaworski and Kohli (1993) which used 32 indicators to cover the three dimensions of the market orientation concept. These 32 indicators were used in another study that measured market orientation within the Norwegian hotel industry (Sandvik 1998). A step-wise regression was used on these data to identify those indicators that explained the most variance. This analysis revealed

that four items measures intelligence gathering, three items measures intelligence dissemination, and three items measures intelligence responsiveness. Ten formative items measures the three dimensions, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. To be able to relate the market orientation activities as facets of market orientation as a syndrome, being a measure of market orientation efficiency, one must place equal emphasis on the three dimensions. This is done by multiplying the activities in the later analysis.

Market orientation intelligence gathering (based on Jaworski and Kohli 1993):
Question 2. Individuals from our manufacturing department interact directly with customers to learn how to serve them better.
Question 4. We are slow two detect changes in our customers' product preferences (reversed).
Question 8. In our business unit, intelligence on our competitors is generated independently by several departments.
Question 10. We periodically review the likely effect of changes in our business environment (e.g., VAT, new alliance, new patterns of travel) on customers.

Market orientation intelligence dissemination (based on Jaworski and Kohli 1993):
Question 2. We have interdepartmental meetings at least once a quarter to discuss market trends and developments.
Question 6. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.
Question 7. There is minimal communication between marketing and manufacturing departments concerning market developments (reversed).

Market orientation intelligence responsiveness (based on Jaworski and Kohli 1993):

Question (design) 4. We periodically review our product development efforts two ensure that they are in line with what customers want.

Question (implementation) 7. When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.

Question (design) 7. The product lines we sell depend more on internal politics than real market needs (reversed).

Market orientation scope

The market orientation scope is defined as the positive difference between the company's actual service market and the domain of market orientation. The term is taken from March (1991) and the measures are adapted from Sandvik (1998: 119). The terms represent the degree of whether the company collects intelligence from customer segments beyond the current service market, to what extent the company has more knowledge about trends than its competitors, and whether they are more concerned to discover new customer groups. Five Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. We collect much intelligence about customer groups not currently being served by us.

Question 2. Compared to our competitors, we have much more knowledge about new trends in the hotel industry.

Question 3. We concentrate all attention toward current customers and competitors (reversed).

Question 4. Compared to our most important competitors, we are much more concerned discovering new customer segments Question 5. Compared to the competitors, we are much more concerned about what competitors in other markets do

Market orientation competitiveness

Market orientation competitiveness is defined to be the degree of automated procedures for the implementation of the market orientation activities. This tacit knowledge occurs as a result of the absence of codability, perceived importance of system dependency, and the observability of the processes. The items are based on Zander and Kogut (1995) and Sandvik (1998), and capture tacit knowledge through lack of writability, lack of explicit knowledge and lack of formal learning. Three Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. A useful manual describing our market intelligence generation, dissemination, and responsiveness can be written (Reversed) Question 2. It is possible for anyone in our management team to know everything about what the hotel does to gather, disseminate and respond to market intelligence (Reversed) Question 3. A competitor can easily learn how we gather market intelligence; disseminate the intelligence in the hotel, and how the intelligence is being used in decisions (Reversed)

Product superiority

Product superiority measures the uniqueness of the products attributes. The definition covers the uniqueness in terms of customer value, and uniqueness in relation to differentiation of the competition. The items are derived from

Cooper’s (1994) indicators of product superiority. Four Likert-scaled items measures this construct (see Sandvik 1998), based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. Unique attributes and characteristics of the customer - not available from competitive products Question 2. Good value for money for the customer (positive economic impact on the customer) Question 3. Excellent relative product quality - relative to competitor's products, and in terms of how the customer quality measures Question 4. Superior price/ performance characteristics for the customer relative to competitors' products

Exogenous factors

Shared vision

Shared vision is defined as the extent the employees agree on the company's more general goals, in other words a description of the direction of learning (Sinkula, Barker and Nordewier 1997). The term has its roots in Senge (1990) and Tobin (1993) and the operationalization is based on Sinkula, Barker and Nordewier (1997). Four Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. There is a commonality of purpose in my organization Question 2. There is total agreement on our organizational vision across all levels, functions, and divisions Question 3. All employees are committed to the goals of this organization.

Question 4. Employees view themselves as partners in charting the direction of the organization.

Shared market orientation vision

Shared market orientation vision is an expansion of the concept of shared vision, and identifies the degree to which the employees agree on the company's ambitions to be market-oriented. The term has a cultural association, and therefore measures the cultural agreement on being market oriented. Thus, I measures whether a company's shared vision about being market oriented results in shared learning for this purpose because a shared market orientation vision will direct the learning. There is no previous measure of this construct, so I extended the shared vision concept to include market orientation (see Sinkula, Barker and Nordewier (1997: 316)). Four Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. There is a commonality of putting the customer in focus in my organization
Question 2. There is total agreement on our organizational vision about putting the customer in focus across all levels, functions, and divisions
Question 3. All employees in this organization are committed to the goals of offering the customers superior products compared to our competitors
Question 4. Employees view themselves as partners in developing superior products to our customers

Commitment to learning

Commitment to learning is about whether the value placed on learning is seen as immediately obvious within the organization (Senge 1990). The indicators that are used to tap this construct are well-grounded in the literature, and the specific

wording builds on Galer and Heijden (1992), Tobin (1993) and adapted by Sinkula, Barker and Nordewier (1997). Four Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. Managers basically agree that our organization's ability to learn is the key to our competitive advantage
Question 2. The basic values of this organization include learning as key to improvement
Question 3. The sense around here is that employee learning is an investment, not an expense
Question 4. Learning in my organization is seen as a key commodity necessary two guarantee organizational survival

Open mind

The concept of open mind is defined to include the ability to develop/ revise mental models (Huber 1991; Sinkula, Barker and Nordewier 1997). Thus, unlearning is central to the concept, and measures the intensity of the learning. Unlearning is thus a prerequisite to discard existing knowledge in order to absorb new. Thus, the knowledge development will correlate with the market developments. The term open mind is used by Senge (1990), Day (1991) and Slater and Narver (1994). The original item was evaluated by a panel of business practitioners and academics. In this connection, a number of item were eliminated, added, and reformulated (Sinkula, Barker and Nordewier 1997: 311). Three Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Question 1. We are not afraid two reflect critically on the shared assumptions we have made about our customers
Question 2. Personnel in this organization realize that the very way they perceive the marketplace must be continually questioned
Question 3. We rarely collectively question our own biases about the way we interpret customer intelligence (recoded)

Knowledge level

Knowledge level refers to the amount of stored intelligence or experience that an organization has about a particular phenomenon. The concept has been used by Moorman and Miner (1997: 103) and was operationalized to capture the amount of knowledge, experience, and familiarity an organization has about a product category. Four Likert-scaled items measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'. The measures are listed below:

Prior to the project, compared to companies in our industry, my division had:
Question 1. - a great deal of knowledge about this category
Question 2. - a great deal of experience in this category
Question 3. - a great deal of familiarity in this category
Question 4. - invested a great deal of R & D in this category

Market-based incentives

Market-based incentives develop a reward system that motivates the long-term focus on customer satisfaction and profitability. The concept is based on Kohli, Jaworski and Kumar (1993). The items assesses the degree of how customer relationships, customer satisfaction and market-orientation behavior was used to evaluate and reward individuals in the organization. Six formative items

measures this construct, based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'.

Question 1. No matter which department they are in, people in this business unit get recognized for being sensitive two competitive moves. Question 2. Customer satisfaction assessments influence senior managers' pay in this business unit Question 3. Formal rewards (i.e. pay raise, promotion) are forthcoming to anyone who consistently provides good market intelligence. Question 4. Sales person's performance in this business unit is measured by the strength of relationships they build with customers. Question 5. Sales person's monetary compensation is almost entirely based on their sales volume (reversed) Question 6. We use customer polls for evaluating our salespeople

Turnover

The definition of turnover of employees is based on Simon (1991) and happen when members of an organization quits and is replaced by new personnel. Thus, turnover occurs at the exit and entrance of new employees, which necessitates a control of industry fluctuations. I use one indicator to measure the concept based on a five point scale with the following scale: 1 - 'very small extent' to 5 'very great extent'.

Question 1. Compared with other companies in the same industry and in the same area we have a high turnover of employees

4.4 Development of the questionnaire

After the development of manifest and latent measures of variables, and the sample setting has been determined, the next phases is to construct the sample

questionnaire for the data collection. The development of the questionnaire relates to Bollen's (1989) fifth phase in the measurement development. A pretest of the measurements was done through interviews with prospective respondents. The language, wordings, industry- expressions and the sequence of wording and questions, was reviewed and reconsidered. To test for translation errors, the indicators were translated from English to Norwegian and back to English.

Data collection

Managing director/ general manager of the hotels were selected as key informants. It is believed that these informants possess the necessary knowledge for answering the questions (Dess and Robinson 1984). Deshpandé, Farley and Webster (1993) recommend using the customers as the respondents when measuring a company's degree of market orientation. Unfortunately, this was not possible for this project.

To collect the data I used phone interviews. The advantage of this method is the ability to make appointment for 'call-back' time to those respondents who were busy (Frankfort-Nachmias and Nachmias 1996). Phone interviews are a quick way to collect data, and a professional marketing analysis bureau sampled 191 respondents from a list of 500 hotels in two weeks. This gives a response rate of 38.2%.

Frankfort-Nachmias and Nachmias (1996) find little difference among the phone-postal and personal interviews with regard to validity. The following table shows the distribution of respondents according to selected indicators.

Member of hotel chain:	Yes: 54% No 46%
Open months per year:	12 months: 77%
Sales revenue	> 5 million - 23.4% 5-10 million - 25.5% 10-20 million - 25.0% 20-30 million - 8.7% 30-40 million - 7.1% 40 million < - 10.3%

Chapter 5. Test of the measurement model

This chapter will explain the development and selection of the measurement model that will be used for the further analysis.

This sixth and final phase of the measurement development by Bollen (1989) is the validation of the measures before including them into the analysis section. According to Anderson and Gerbing (1988) the measurement model should be satisfactory before testing structural model. This way we avoid situations where error in the measurement leads to incorrect specification in the structural model. The test of measurement model will be done using two steps. First, the initial analysis of the formative measures will be conducted. This applies to the three dimensions of market orientation as well as the market based incentives. The second step is to analyze the measurement model including all indicators, both the reflective and formative, to evaluate the unidimensionality and the model fit. This is followed by a test of the constructs discriminate validity and reliability.

5.1 Descriptive statistics

Since multivariate data analysis assumes normally distributed data (Berry 1993), I will start with a univariate statistics analysis which analysis the data's mean, standard deviation, kurtosis and skewness. Kurtosis and skewness indicates the shape of the cure. Normal distributed data has a kurtosis = 0 (Bagozzi 1994).

An analysis of the univariate statistics at the indicator level should report an average value at 3.0, given that I have a 5 point scale. The greatest discrepancies can be found for questions 7.2 and 2.3, with average numbers at 4.38 and 4.34, and question 9 with an average at 1.59. A review of the standard deviation of the

indicators shows that no indicator has deviations larger than |0.38|. Indicator number 9 has skewness at 1.53, while the kurtosis is at 1.44. Also, the missing values need to be evaluated before including the numbers into the data analysis. Among a sample of 191 respondents, the largest missing value is 7%. This low percentage may be because of phone as a sampling method. Two cases were deleted due to outliers. Therefore, the further analysis is based on 189 respondents.

Descriptive statistics at indicator level

Indicators	N	Mean	St. dev-	Skewness	Kurtosis
Shared visions					
1	191	4,14	,75	-,68	,40
2	191	3,81	,85	-,41	-,10
3	190	3,79	,88	-,41	-,26
4	191	3,46	,94	-,35	-,10
Shared market orientation visions					
1	191	4,14	,67	-,81	,03
2	191	4,29	,71	-,67	-,09
3	186	4,09	,76	-,45	-,32
4	191	4,04	,75	-,30	-,50
Commitment to learning					
1	187	3,91	,86	-,30	-,70
2	191	4,24	,78	-,71	-,21
3	190	4,34	,84	-1,20	1,07
4	191	4,23	,77	-,77	,56
Open mind					
1	191	4,02	,81	-,60	,30
2	190	3,96	,89	-,57	-,15
3	188	3,07	1,12	,05	-,82
Knowledge level					
1	189	3,52	,80	,14	-,47
2	187	3,30	,82	,15	,37
3	183	3,27	,70	,15	,99
4	178	2,90	,83	-,06	1,05
Turnover					
1	183	1,59	,97	1,53	1,44
Market-based incentives					
1	186	2,10	1,06	,53	-,66
2	184	2,31	1,30	,49	-,95

3	187	2,58	1,31	,19	-1,19
4	180	2,97	1,25	-,20	-,88
5	179	3,76	1,33	-,59	-,98
6	191	3,15	1,29	-,24	-1,03
Market orientation efficiency					
1	187	3,63	,83	-,46	,83
2	186	3,52	1,14	-,59	-,45
3	187	3,98	,89	-1,01	1,39
4	188	2,77	1,24	,02	-,95
Market orientation scope					
1	189	3,47	1,23	-,32	-,93
2	179	2,95	,84	,10	,89
3	191	1,81	,79	,88	,92
4	184	3,14	,87	-,01	,87
5	182	2,88	,88	-,10	,49
Market orientation competitiveness					
1	189	2,72	1,04	,37	-,28
2	187	2,79	1,16	,24	-,72
3	186	3,44	,96	-,08	-,33

5.2 Test of measures

The test of measures will start with analyzing the measurement model (Anderson and Gerbing 1988). The measurement model consists of both formative and reflective measures. I start with the formative measures, followed by the reflective measures.

Validation of formative measures

The model consists of four variables that are formative. These are the three market orientation activity dimensions and the market-based incentive system. First, market orientation activities will be evaluated.

The more intelligence activities an organization carries out, the more market-oriented they will be. Therefore, the three dimensions of market orientation, hereof the gathering, the dissemination and the response to the market

intelligence, can be seen as formative measures. Therefore, a formative measure can, in specific cases, show negative or zero correlations despite capturing the same concept. Ergo, the companies can choose to implement the various market orientation activities differently. For example, one company can choose to disseminate the intelligence through written reports, while others choose to have regular meetings where the intelligence is shared between the leaders. For intelligence gathering, some companies can choose to formalize the data which the seller collects when being in touch with the customers, while others choose to perform formal market surveys that map market trends. Based on this, the variation in the intelligence activities makes it not relevant to assume a linear or correlated relationship. Rather, the accomplishment of each market orientation activity will reflect the organizations level of market orientation (Bollen and Lennox 1991).

To verify the formative measures, I used a principal component analysis. This analysis identifies the market orientation activities that, by constructing linear combinations of the events, explain a large part of the total variance. For the market orientation gathering, the four indicators explain 54.9 percent of the variance in the construct. The three indicators of market orientation dissemination explain 55.4 percent of the construct. The market orientation response dimension consisted of three indicators, which explained 46.1 percent of the variation. To be able to relate the market orientation activities as facets of market orientation as a syndrome, we must place equal emphasis on the three dimensions. This is done by multiplying the activities. Therefore, if a company is excellent at gathering and disseminating market intelligence, and gets the score 5 for each dimension, but lack the ability to use the intelligence in their strategic decision making, the score is 1, they are, by treating market orientation as a syndrome, not market oriented (5 x 5 x 1 = 25). If the company is average on each of the dimensions, they obtain the score 27 (3 x 3 x 3). Therefore, high

number reflects a company with an efficient market orientation, while low numbers reflect a company with an inefficient market orientation.

Principal component analysis for market orientation intelligence generation		
Indicator	**Factor**	**Communality**
1	,705	,496
2	,745	,555
3	,797	,635
4	,689	,488
Eigen value	2,173	

Principal component analysis for market orientation intelligence dissemination		
Indicator	**Factor**	**Communality**
1	,656	,431
2	,757	,573
3	,802	,644
Eigen value	1,648	

Principal component analysis for market orientation intelligence responsiveness		
Indicator	**Factor**	**Communality**
1	,269	,072
2	,815	,664
3	,802	,644
Eigen value	1,380	

The second construct in this study that are based on formative measures, are market-based incentive systems. Market based incentive systems include

different ways to reward performance and behavior. These incentive systems vary between companies. The six indicators that measured market-based incentive systems captured 51.4 percent of the variance in the construct.

Principal component analysis for market orientation intelligence responsiveness		
Indicator	**Factor**	**Communality**
1	,643	,414
2	,798	,637
3	,843	,711
4	,753	,568
5	-,714	,509
6	,496	,246
Eigen value	3,085	

Selecting estimation method

The subsequent analysis will analyze the measurement model using LISREL in a structural equation model (SEM). SEM tests a theory's ability to reproduce the observed matrix (Hair, Anderson, Tatham and Black 1995), and the better the matrix is reproduced by the estimation based on the theory, the better one can assume that the measurement model is true for the population. Thus, it is not indifferent which matrix that is used for the estimation. The background for selecting the input matrix depends on the matrix's ability to meet the conditions that the SEM requires. This is the asymptotic equivalence between the observed covariance and the estimated covariance. Such equivalence implies that the model is nearly perfect specified, and requires a multivariate normal distribution and an infinite sample (Bollen 1989).

The estimation procedures often consist of a choice between the Maximum Likelihood (ML), Generalized Least Squares (GLS) or Weighted Least Squares (WLS) (Browne and Cudeck 1993). Although a 5 point ordinal scale favors a polycoric correlation matrix because it lacks a natural midpoint, such an analysis would require a sample consisting of approximately 3000 respondents. The choice is therefore between the GLS and ML. In this case, the ML is chosen because it will report a more accurate picture since it punishes poorly fitted and complex models. ML uses the covariate matrix as input, and the complications in the choice of ML is that it only includes the second-order moment, leaving out the fourth-order moment (kurtosis).

Specification of measurement models

The use of SEM in the measurement model is in principle a confirmatory factor analysis, which only has differences in relation to the structure model in that one do not restrict the relationships between the latent variables (Hair, Anderson, Tatham et al. 1995). The a priori model includes the indicators for each construct. The analysis failed the Chi-square test. The Chi-square test is a test of perfect fit between the estimated and the observed covariance matrix. The test implies that P (H0: $\Sigma = \Sigma(0)$) = true, (taking into account the random measurement error), and is a very strict test. Such a test would favor the small sample, and the critical N shows that the model can not withstand more than 131 respondents before the Chi-square test will reject the model. The Root Mean Square Error of Approximation (RMSEA) fit indicator is considered a more realistic measure of adaptation since it rewards simple models and has known sample distribution, which means that it can be used as test statistics (Browne and Cudeck 1993). A rule of thumb is that the RMSEA should be < 0.050. For the priori model, the RMSEA is at 0.055, which means above the limit. Also, the fit indexes Comparative Fit Index (CFI) and Non Normed Fit Index (NNFI) is reported. The logic of CFI and NNFI is that no more complicated models can be

assumed for the data if the data supports the mutual uncorrelated model. These fit indices are complementary because the CFI is population-based and dependent on sample size, while NNFI favors simple models. The CFI for the a priori model is 0.81 and 0.78 for the NNFI. Both values should be above the recommended level of 0.90 to be satisfactory. The numbers shows that indicator one in the construct market orientation competitiveness has a standard error at -0.41, while indicator two has a standard error at 0.92, and indicator three has a standard error at 0.97. Therefore, the misfit might be due to the negative standard error for indicator one, which results in a standardized factor loading at 1.24, while the numbers should be between |1|. Anderson and Gerbing (1988: 415) recommend that in such cases, one should use the error variance based on previous studies, although this is often difficult to obtain such information. Therefore, another option to solve the problem is to restrict the model by setting the error terms within the same construct to be equal.

According to Anderson and Gerbing (1988) the measurement model is less theory-driven than the structural model, and respecifications may occur, but always in conjunction with an assessment of the theories behind. Removal of the item reduces generalization because a concept is operationalized in the purpose to cover the concept and one should therefore exclude as few items as possible. However, indicator three in the market orientation scope is excluded since the factor loading is -0.01, which means that it does not explain the construct. The item taps the degree to which the organizations prioritized existing customer groups, and was reversed in the questionnaire. Moreover, indicator one in market orientation scope and indicator three in commitment to learning reports high degree of cross loadings on other constructs. Question one in market orientation scope is about whether the hotel takes care of intelligence about the customer groups they do not currently serve. This question has been mixed to measure intelligence gathering. Question three in commitment to learning deals with viewing the employees as an investment and not an expense, where the

term 'development' have created inaccuracy as this might be related to personal development through promotions in market based incentives.

Model	Fit indices	Respecifications
Model 1	Chi-square = 833.67 (p=0.00) Degrees of freedom = 541 RMSEA = 0.054 NNFI = 0.78 CFI = 0.81	A priori measurement model
Model 2	Chi-square = 686.85 (p= 0.00) Degrees of freedom = 444 RMSEA = 0.050 NNFI = 0.83 CFI = 0.86	Excluded item three in market orientation scope because of low factor loading. Item one in market orientation scope and item three in commitment to learning is excluded due to cross loadings. Error terms are set to unity for item one, two and three in market orientation competitiveness.

The revised measurement model reports slightly satisfactory fit indices, although the Chi-square is significant. However, the RMSEA is satisfactory at 0.050. The weakness of the revised model is NNFI number at 0.83, and CFI at 0.86. The alternative is to remove more indicators to improve the model fit, but I choose not to do this. The indicators in this study are explorative in nature, and the fit must therefore be evaluated thereafter.

Discriminate validity

The discriminate validity is about whether the constructs are non-redundant and different from each other. Discriminate validity may be due to random measurement error and/ or systematic measurement errors. Bagozzi and Yi (1988) points out that the concepts can be tested for redundancy by investigating the correlation between the concepts. In the matrix one sees that none of the correlations +/ - 2 standard deviations includes 1 and one can assume discriminant validity between the constructs.

Correlation matrix											
	ξ_1 [a]	ξ_2	ξ_3	ξ_4	ξ_5	ξ_6	ξ_7	ξ_8	ξ_9	ξ_{10}	ξ_{11}
ξ_1	-										
ξ_2	0,78	-									
	(0,06)										
ξ_3	0,38	0,48	-								
	(0,08)	(0,08)									
ξ_4	0,62	0,62	0,55	-							
	(0,09)	(0,09)	(0,09)								
ξ_5	0,35	0,42	0,32	0,49	-						
	(0,09)	(0,08)	(0,08)	(0,10)							
ξ_6	0,06	0,02	0,16	0,24	0,22	-					
	(0,08)	(0,08)	(0,08)	(0,09)	(0,08)						
ξ_7	-0,24	-0,13	0,07	-0,13	0,09	0,26	-				
	(0,08)	(0,08)	(0,08)	(0,10)	(0,08)	(0,07)					
ξ_8	0,41	0,44	0,46	0,77	0,47	0,00	-0,02	-			
	(0,08)	(0,08)	(0,08)	(0,08)	(0,08)	(0,08)	(0,08)				
ξ_9	0,18	0,38	0,38	0,55	0,66	0,32	0,15	0,49	-		
	(0,10)	(0,09)	(0,09)	(0,10)	(0,07)	(0,08)	(0,09)	(0,09)			
ξ_{10}	-0,15	-0,15	-0,27	-0,47	-0,25	-0,09	0,19	-0,34	-0,26	-	
	(0,11)	(0,12)	(0,11)	(0,12)	(0,11)	(0,10)	(0,10)	(0,11)	(0,12)		
ξ_{11}	0,38	0,48	0,04	0,33	0,55	0,04	-0,10	0,36	0,23	-0,37	-
	(0,08)	(0,08)	(0,09)	(0,10)	(0,08)	(0,08)	(0,08)	(0,09)	(0,10)	(0,11)	

ξ 1 = Shared visions

ξ 2 = Common market orientation visions

ξ 3 = Commitment to learning

ξ 4 = Open mind

ξ 5 = Knowledge level

ξ 6 = Market-based incentives

ξ 7 = Turnover

ξ 8 = Market orientation efficiency

ξ 9 = Market orientation scope

ξ 10 = Market orientation competitiveness

ξ 11 = Product superiority

Reliability

Reliability is a validity description of whether the constructs measure what it is intended to measure. Thus, reliability describes how reliable and consistent the indicators are. The measurement and structural models used two methods to check reliability, the one is on the indicator level and the other is on the construct level. The table reports the score with regard to the indicator's reliability and average variance of the concept. Indicator reliability only applies to reflective indicators. According to Jöreskog and Sörbom (1982) these numbers should be above 0.50. The indicator reliability is given by $p_x = \lambda_x{}^2 \operatorname{var}\xi / \left(\lambda_x{}^2 \operatorname{var}\xi + \theta_\delta\right)$ where ξ is the indicators reflection of the concept. The average variance is given by $p_\xi = \sum \lambda_x{}^2 \operatorname{var}\xi / \left(\sum \lambda_x{}^2 \operatorname{var}\xi + \sum \theta_\delta\right)$, where p_ξ is the notation at the variable level (Bollen 1989). Most of the indicators report numbers below the cut-off criteria's. However, the lack of reliability can, to some extent, be taken into account when analyzing the model using SEM.

Measurement model								
Indicators	Factor loading		T-value	Theta – delta	Error term	T-value	Indicator reliability	Average explained variance
Shared visions								
1	λ1,5	0,60	8,28	θ1,1	0,64	8,50	0,36	0,44
2	λ2,5	0,70	10,08	θ2,2	0,50	7,58	0,49	
3	λ3,5	0,76	11,16	θ3,3	0,42	6,70	0,58	
4	λ4,5	0,59	8,08	θ4,4	0,65	8,57	0,35	
Shared market orientation visions								
1	λ1,6	0,60	8,25	θ5,5	0,64	8,45	0,36	0,41
2	λ2,6	0,65	9,12	θ6,6	0,57	8,04	0,42	
3	λ3,6	0,65	9,11	θ7,7	0,57	8,05	0,42	
4	λ4,6	0,66	9,33	θ8,8	0,56	7,93	0,44	
Commitment to learning								
1	λ1,7	0,70	9,82	θ9,9	0,51	7,38	0,49	0,53
2	λ2,7	0,88	12,77	θ10,10	0,23	3,19	0,77	
3	λ3,7	0,56	7,67	θ11,11	0,68	8,72	0,31	
Open mind								
1	λ1,8	0,35	4,34	θ12,12	0,88	9,30	0,12	0,29
2	λ2,8	0,56	7,10	θ13,13	0,69	8,22	0,31	
3	λ2,8	0,65	8,25	θ14,14	0,58	6,91	0,42	

Knowledge level								
1	λ1,9	0,61	8,33	θ15,15	0,63	8,33	0,37	0,43
2	λ2,9	0,69	9,79	θ16,16	0,52	7,50	0,48	
3	λ3,9	0,75	10,82	θ17,17	0,43	6,62	0,56	
4	λ4,9	0,54	7,22	θ18,18	0,71	8,75	0,29	
Market based incentives								
(formative)	λ1,11	1,00	19,39	θ19,19	--	--	--	--
Turnover								
1	λ1,10	1,00	19,39	θ20,20	--	--	--	--
Market orientation efficiency								
Generation	λ1,2	0,65		θ21,21	0,58	7,94	0,42	0,48
Dissemination	λ2,2	0,83		θ22,22	0,32	4,60	0,69	
Responsiveness	λ3,2	0,58		θ23,23	0,66	8,51	0,34	
Market orientation scope								
1	λ1,3	0,68	8,90	θ24,24	0,53	6,66	0,46	0,40
2	λ2,3	0,59	7,54	θ25,25	0,66	7,90	0,35	
3	λ3,3	0,63	8,08	θ26,26	0,51	7,50	0,40	
Market orientation competitiveness								
1	λ1,4	0,55	6,60	θ27,27	0,69	13,71	0,30	0,24
2	λ2,4	0,60	7,41	θ28,28	0,63	13,71	0,36	
3	λ3,4	0,26	2,86	θ29,29	0,93	13,71	0,07	
Product superiority								
1	λ1,1	0,54	7,15	θ30,30	0,71	8,72	0,29	0,43
2	λ2,1	0,63	8,61	θ31,31	0,60	8,09	0,40	
3	λ3,1	0,80	11,45	θ32,32	0,37	5,48	0,64	
4	λ4,1	0,63	8,58	θ33,33	0,61	8,10	0,40	

Summary of the measurement model review

After a review of the descriptive statistics, the divergent validity and reliability, three indicators of a total of 36, were excluded from the analysis. The table summarizes the measurement model analysis:

Constructs	Kept items	Excluded items
Market orientation generation	1, 2, 3, 4	
Market orientation dissemination	1, 2, 3, 4	
Market orientation responsiveness	1, 2, 3	
Market orientation scope	2, 4, 5	1, 3
Market orientation competitiveness	1, 2, 3	
Product superiority	1, 2, 3, 4	
Shared vision	1, 2, 3, 4	
Shared market orientation vision	1, 2, 3, 4	
Commitment to learning	1, 2, 4	3
Open mind	1, 2, 3	
Knowledge level	1, 2, 3, 4	
Market-based incentives	1, 2, 3, 4, 5, 6	
Turnover	1	

Chapter 6. Structural analysis

The previous chapter described the procedures and results for the measurement model. This chapter will discuss the results of the structural analysis.

There are advantages in the use of SEM for theory testing and the testing of hypotheses. First, one will be able to combine the measurement model and structural model in the same analysis. Thus the factor loadings of the indicators can be included into the structure model analysis. The fit indices usually decreases in the structural model, compared to the measurement model. This is because the SEM provides a statistical assessment of the overall model adaptation in addition to each of the free parameters.

6.1 Model fit

While the Chi-square reported significant value, the other fit indices reported are RMSEA, CFI and NNFI. The Chi-square was discarded, and the critical N shows that the model can not withstand more than 137 respondents. The Chi-square divided by the number of degrees of freedom is less than two, and one can therefore assume adequate model fit (Hunt and Morgan 1995). The RMSEA is 0.054 and therefore satisfactory for the structural model. The CFI value was 0.84, which is somewhat below the recommended limit, as were the NNFI value at 0.81. However, I attribute these fit indices to the exploratory nature of the indicators and the research model. A general summary of the structural model analysis can be found in the table.

Fit indices:	
Chi-square	701,54
RMSEA	0,05
NNFI	0,81
CFI	0,84

Explained variance:	
Market orientation efficiency	62%
Market orientation scope	61%
Market orientation competitiveness	26%
Product superiority	24%

General findings:

	Market orientation efficiency	**Market orientation scope**	**Market orientation competitiveness**
Shared visions		-	
Shared MO visions		+	
Commitment to learning			
Open mind	+	+	-
Knowledge level		+	-
Market based incentives	+		
Turnover			+
Product superiority	+	+	-

For the factors that were believed to have influence on the market orientation intelligence efficiency, the explained variance was quite high at 62 %. For

market orientation scope the explained variance were also high, at 61 %. The explained variance for market orientation competitiveness is 26 %. The three market orientation capabilities explained 24% of the variation of product superiority.

6.2 Test of the hypotheses

In the following chapter I will go through each of the hypotheses. The first hypothesis, H1a, shows that the effect from shared vision on market orientation efficiency is not significant and that the gamma coefficient is in the opposite direction (γ_{11} = -0.08, T =- 0.41). Hypothesis H1b predicts a negative effect from the shared vision on market orientation scope. The statistical test supports this hypothesis (γ_{12} = -0.4, t = 1.92). For hypothesis H1c, shared visions predicted a positive effect on market orientation competitiveness while the test shows that this hypothesis is not statistical supported (γ_{13} =- 0.14, t =- 0.56). Therefore, to summarize, the shared visions supports one hypothesis, the effect on market orientation scope.

The predicted effects in H2a, the effect from shared market orientation vision on market orientation efficiency is not statistically significant (γ_{21} = 0.03, t = 0.16). The effect from shared market orientation vision on market orientation scope, H2b, assumed a positive effect, and relationship were statistically supported in the analysis (γ_{22} = 0.31, t = 1.43). For the final influence, H2c, the effect of shared market orientation visions on market orientation competitiveness were not statistically significant (γ_{23} = 0.07, t =- 0.27). Summarized, only the effect from shared market orientation vision on market orientation scope was supported significantly.

I then assumed that the organizations commitment to learning would affect two of the market orientation capabilities. The analysis shows, however, that neither the market orientation efficiency H3a (γ_{31} = 0.02, t = 0.17), nor the market orientation scope H3b (γ_{32} = 0.01, t = 0.04) were affected by commitment to learning. Therefore, commitment to learning turns out to not affect the market orientation capabilities.

For the next set of hypotheses, I tested the effect of open mind on the market orientation capabilities. First I predicted that the open mind would positively affect the market orientation efficiency, H4a. This relationship received strong statistical support in the analysis (γ_{41} = 0.71, t = 2.36). Open mind is also believed to have a positive effect on the market orientation scope H4b, and also this relationship turned out to be significant (γ_{42} = 0.33, t = 1.70). Finally, I predicted a negative effect from open mind to market orientation competitiveness, H4c, and this relationship received statistical support (γ_{43} =-0.46, t = -1.99). To summarize, a company's open mind turns out to strongly affect all of the three market orientation capabilities.

Hypothesis H5a predicts a positive relationship from the knowledge level on market orientation efficiency. This relationship is not significant in the analysis (γ_{51} = 0.11, t = 0.90). The statistical analysis reported a strong and significant positive effect from knowledge level on market orientation scope (γ_{52} = 0.52, t = 3.87), supporting H5b. For hypothesis H5c I assumed a negative impact from the knowledge level of market orientation competitiveness. The results were statistically significant (γ_{53} = -0.20, t = -1.34). To summarize, knowledge level is found to affect the market orientation scope and market orientation competitiveness in the hypotheses test.

For hypothesis H6a, I predicted that the market-based incentives would positively affect market orientation efficiency. This test were significant (γ_{61} = 0.13, t = 1.51). However, hypothesis H6b, the effect from market-based incentives on market orientation scope, turns out to not to be statistically significant (γ_{62} = 0.08, t = 0.98). H6c predicts a positive effect from market-based incentives on market orientation competitiveness. The test do not support this hypothesis (γ_{63} = 0.07, t = 0.69). Therefore, to summarize, the marked-based incentives turns out to positively affect market orientation efficiency.

The final hypotheses regarding effects on the market orientation capabilities investigate the effect of turnover. First, the analysis shows no support for turnover to affect market orientation efficiency H7a (γ_{71} = 0.05, t = 0.57), neither for market orientation scope in H7b (γ_{72} = 0.05, t = 1.06). However, while turnover in H7c were predicted to have a negative effect on market orientation competitiveness, the results turned out to be significant and positive (γ_{73} = 0.20, t = 1.88). Therefore, none of the hypotheses regarding turnover were supported in the analysis.

The next three hypotheses test the effect from market orientation capabilities on product superiority. All three capabilities turned out to have a significant effect on product superiority, hereof H8a a positive effect from market orientation efficiency (β_{41} = 0.19, t = 1.56), H8b a positive effect from market orientation scope (β_{42} = 0.16, t = 1.33), while H8c had opposite effect from the hypothesis, ending up with a negative effect from market orientation competitiveness (β_{43} = -0.30, t = -2.20). Therefore, two of the three hypotheses were supported.

Results of the structural model

Goodness-of-fit indexes:

Chi-square = 701.54 (p=0.01)
Degrees of freedom = 455
RMSEA = 0,054
NNFI = 0.81
CFI = 0,84

Gamma:	ξ_1	ξ_2	ξ_3	ξ_4	ξ_5	ξ_6	ξ_7	R^2
η_1	-0,08	0,03	0,02[a]	0,71***	0,11	0,13*	0,05	0,62
	(-0,41)	(0,16)	(0,17)[b]	(2,63)	(0,90)	(1,51)	(0,57)	
η_2	-0,41**	0,31*	0,01	0,33**	0,52***	0,08	0,09	0,61
	(-1,92)	(1,43)	(0,04)	(1,70)	(3,87)	(0,98)	(1,06)	
η_3	0,14	0,07	--	-0,46**	-0,20**	0,07	0,20**	0,26
	(0,56)	(0,27)		(-1,99)	(-1,34)	(0,69)	(1,88)	

Beta:	η_1	η_2	η_3	
η_4	0,19*	0,16*	-0,30**	0,24
	(1,56)	(1,33)	(-2,20)	

ξ_1 : Shared visions
ξ_2 : Shared market orientation visions
ξ_3 : Commitment to learning
ξ_4 : Open mind
ξ_5 : Knowledge level
ξ_6 : Market based incentives
ξ_7 : Turnover
η_1 : Market orientation efficiency
η_2 : Market orientation scope
η_3 : Market orientation competitiveness
η_4 : Product superiority

[a] : standardized regression coefficients
[b] : T-value
*** p < .01
** p < .05
* p < .10

Chapter 7. Discussion and implications

This chapter will discuss the results from the hypothesis testing presented in Chapter 6. The discussion is divided into three parts. First I discuss the theoretical implications of the study. Next I will discuss the practical managerial implications of the findings. The final section contains a discussion of the methodological limitations and offers suggestions for further research.

7.1 Theoretical implications

The purpose of this book has been to investigate factors that affect knowledge development in market-oriented businesses. Answers to issues in this field were expected to identify driving forces enabling market-oriented companies to generate more knowledge from the existing and available intelligence.

To answer the initial question, two issues have been investigated. The first issue was to identify the learning process within market-oriented firms. Identification of the three market orientation capabilities was done in Chapter 2. The second issue was to identify factors that influence the companies' ability to carry out the micro-processes of market orientation learning. This was explained in chapter 3.

In summary, this study has identified the factors that affect the market-oriented companies' ability to generate market awareness, both through an established awareness of various ways by which to measure market orientation, and the conditions that facilitate or hamper this ability. By relating market orientation to the organizational learning literature, I was able to segment knowledge processing into three micro-processes which in turn enabled me to analyze different processes of market orientation learning. On the basis of this, the

present study has contributed a deeper understanding of market orientation, and this increased understanding was in turn developed and charted based on existing theories and the relationships between them. I submit, therefore, that this study has contributed to a more scientific understanding of the market orientation phenomenon. A description of the scientific contributions in the study is discussed in more depth in the next chapter.

Identifying market orientation learning

The starting point for the study was to investigate why companies have different degrees of market orientation. This could be due to two factors. Firstly, it may be because market orientation is treated differently in the literature. Thus the difference in the focus of market orientation resulted in different measures of the company's degree of market orientation. Second, the differences in the companies' market orientation might come from aspects of the business itself.

The discussion began with an explanation of the various ways literature has defined market orientation. This resulted in an analysis of the three perspectives of market orientation, being a behavioral perspective (Kohli and Jaworski 1990; Narver and Slater 1990), a resource perspective (Hunt and Morgan 1995) and a learning capability perspective (Sinkula 1994; Day 1994a). The behavioral perspective established researchers understanding of market orientation. This perspective covers both a 'market orientation philosophical' approach and a 'market orientation implementation' approach (Deshpandé, Farley and Webster 1993). The former saw market orientation as a cultural manifestation in the business as necessary to complete market intelligence activities, while the latter looked at market orientation based on the ability to conduct the three intelligence activities. The two approaches were treated under the same perspective since they both defined the purpose of market orientation to consist of activities, but they varied in focus with regard to the emphasis on attitude to- versus the ability to perform activities.

The second perspective was the resource perspective on market orientation. This perspective had two focuses. First, it focuses on how the market orientation information processing guided the company into developing a unique ability to combine their resources in a better way than their competitors (Hunt and Morgan 1995). Then the perspective developed looked at how market orientation in itself was in fact a unique asset in the company. It was then a goal to protect this resource to competition, and market orientation implementation itself becomes a competitive advantage.

After that the development went on to an understanding of how the market orientation generates superior market knowledge, one was interested in how the internal aspects of the company itself could contribute to the knowledge creation, through a focus on the intelligence that the activities involved. This third perspective on market orientation looked at how the in-house activities develop the ability to be market oriented (Sinkula 1994; Day 1994b; Sinkula, Barker and Nordewier 1997).

The first part of chapter two have thus shown that differences in the explanatory power of market orientation perspectives, meaning that the perspectives cover different parts of the market orientation in business. Different choices of perspective affect how to measure the degree of market orientation, and which measures to use when identifying consequences of market orientation.

The purpose of section two in chapter two was to analyze how organizational learning could explain how the learning process in the market-oriented businesses worked. This resulted in the mapping of the three micro-processes within learning theory, behavioral process, knowledge process and the value process, which was transmitted to the understanding of market orientation learning process (Sinkula, Barker and Nordewier 1997). Thus, one was able to

split market orientation learning process into cause-effect, which was a starting point for understanding how market orientation as learning capability generate market awareness. This section thus helped to explain market orientation capabilities.

Factors that facilitated the market oriented companies learning capabilities

This understanding of market orientation includes the three micro-processes on the basis of information processing. The micro-processes, which were used as an explanatory mechanism on how market-oriented company generates market awareness, enable the analysis of cause-effects. The market orientation information processing is reflected through three potential behavioral changes. This is the first the capability of market orientation efficiency, the second capability is market orientation scope, while the third capability is market oriented competiveness.

The study develops hypotheses regarding the causal effects. The causal factors that were analyzed to affect was the shared vision, share market orientation vision, commitment to learning, open mind, knowledge level, market-based incentives, and turnover of employees. The causal factor's effect on behavioral factors in market orientation accounted for the theoretical model in the thesis.

Shared visions. The next part of this book will discuss each of the individual findings and comment them on an ongoing basis. The first is about the relationship between the predicted effects of the shared vision on the market orientation capabilities. Shared vision is thought to be the value of the organization's common objectives, helping employees to pull in the same direction in the company's development (March 1991). This was believed to have a positive effect on the company's implementation of the intelligence (Zander and Kogut 1995). The study findings were, however, a non significant

correlation. This means that the general shared visions do not affect the gap between the intelligence activities. Shared visions reduced the organizations ability to broaden their scope of the market orientation focus. This implies that the companies becomes more static and lowers their search for new solutions, which means that the processing in discovering new market opportunities were slowed (Weick 1976). Shared vision did not affect market orientation competitiveness, meaning that it did not affect the tacitness within the market orientation routines.

Hypothesis: Effects from shared visions			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	-	NS
Market orientation scope	-	-	P < 0.10
Market orientation competitiveness	+	+	NS

Shared market orientation visions. The second alleged relationship is about the effect from shared market orientation visions on market orientation capabilities. Shared market orientation visions concerned specifically about the company's visions of being market oriented. It predicted a positive relationship from the shared market orientation visions on market orientation efficiency with the reason that it would lead to a better implementation of the activities through the joint efforts that they were having focusing on the activities. The direction of this hypothesis was confirmed but the finding is not significant. The second hypothesis is a predicted positive effect on market orientation scope. This was assumed on the basis of the shared market orientation visions to lead to an awareness of the dynamic market developments, which will have a positive effect on the ability to discover new markets that develop accordingly. This relationship was confirmed in the test. The final context of shared market orientation visions was a predicted positive effect on market orientation

competitiveness. This relationship was assumed on the basis that the shared market orientation visions develop tacit routines that are dynamic and seekers in the guidelines to organizational development so that, over time, the tacit procedures will be strengthened. This hypothesis was not statistical significant.

Hypothesis: Effects from shared market orientation visions			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	+	NS
Market orientation scope	+	+	P < 0.10
Market orientation competitiveness	+	+	NS

Commitment to learning. The third hypothesis was about the effect from commitment to learning on market orientation capabilities. In order for learning to occur to the employees feel a cultural compliance for learning, since no learning will occur unless the organization emphasizes learning. This relationship will therefore be particularly important to prove to the case for why the knowledge of the market orientation learning process leads to the strengthening of the ability to complete the process. It was developed two hypotheses for the commitment to learning. The first effect was a predicted positive effect from commitment to learning on market orientation efficiency. This positive effect was argued that commitment to learning was necessary for reducing the intelligence activity gap (Simon 1991). The empirical discovery shows virtually no correlation. The second hypothesis was a positive effect of commitment to learning on market orientation scope. Neither this effect was supported. On the basis of this finding, I can draw the conclusion that a commitment to learning has no effect on the market oriented companies' generation of learning.

Hypothesis: Effects from commitment to learning			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	0	NS
Market orientation scope	+	0	NS

Open mind. The fourth set of hypotheses in the causal model is the assumed effect of open mind on market orientation capabilities. An open mind was argued to have an influence throughout the need to unlearn existing rules and practices that one should be able to absorb new methods and continually develop their knowledge. It was predicted a positive effect from the open mind to market orientation efficiency. The rationale was that open mind increased the awareness, ability and improved the intelligence activities. And this was supposed to reduce the gap between the activities. The hypothesis was confirmed in the data, and the relationship was significant. For the second hypothesis I expected a positive relationship between open mind and market orientation scope. This relationship was expected because an open mind would facilitate the ability to discover new market opportunities through the ability to absorb new knowledge. The relationship is significant. For open mind, this is also predicted to have a negative effect on market orientation competitiveness. This is argued from an understanding that an open mind is all about unlearning, which I predicted would hamper the tacitness within the organization. The hypothesis is supported significantly.

Hypothesis: Effects from open mind			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	+	P < .01
Market orientation scope	+	+	P < .05
Market orientation competitiveness	-	-	P < .05

Knowledge level. Knowledge level is about the creation of an organizational memory that is able to take part of the intelligence that is processed. This knowledge will thus have a progressive increase in the level of knowledge, which will increase the ability to absorb intelligence and the interpretation (Churchill 1979). Knowledge level is predicted to have a positive effect on market orientation efficiency through the increased ability to implement market orientation activities. Empirically this link was not supported. Next I predicted a positive link from the knowledge level on market orientation scope. This effect is anticipated because the more knowledge the organization will have about the market and the market developments, the better able they will be to interpret the developments and changes. This relationship was significant support in data analysis. For the third hypothesis, I estimated a positive impact from the knowledge level on market orientation competitiveness, and this was argued out from the fact that that learning leads to an increased ability to implement repeated routines. The hypothesis shows a significant path in the opposite direction, which is surprising. Going back to the theories used to explain the level of knowledge, it is explained through the mental level the company has on their knowledge. Market orientation competitiveness is about procedures that are not easily copied or imitated by other companies, since they are developed over time. One effect that can be reflected by this finding may be that the level of knowledge is not so much the time factor, but the awareness of investing in learning. This relationship should be explored more thoroughly in future studies.

Hypothesis: Effects from knowledge level			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	+	NS
Market orientation scope	+	+	P < .01
Market orientation competitiveness	-	-	P < .05

Market based incentives. The penultimate relationship that was supposed to affect market orientation as a learning process, was the market-based incentives. Market-based incentives are about rewarding workers for long-term thinking on the organization's long-term focus on customer satisfaction and profitability. It was assumed that market-based incentives helped to motivate employees to conduct market orientation activities, so that the intelligence system generates more market knowledge as the link between the activities are carried out closer. This positive effect on market orientation efficiency was significantly confirmed in the analysis. Also a positive, although not significant effect, was established from market-based incentive systems on market orientation scope. This is because the quest for new intelligence sources was encouraged. Finally, market-based incentives presumed a positive effect on market orientation tacitness. Neither this effect was significant.

Hypothesis: Effects from market-based incentives			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	+	P < .10
Market orientation scope	+	+	NS
Market orientation competitiveness	+	+	NS

Turnover. The final alleged relationship is the effect of employee turnover. These relationships are shown in the table. Turnover was described by both the exit of existing employees and the inclusion of new ones. Thus I mapped turnover through how the new recruits affected the learning process which the market oriented companies entailed. Turnover of employees can change the learning process through breaking existing procedures and facilitate new thinking and new knowledge (Cook and Campbell 1979). It was assumed a positive impact from the turnover of employees on the market orientation

efficiency. The finding was not significant. For turnover of employees on the market orientation scope, this has been argued to have a positive effect in that it was assumed to introduce new practices and new ways to look at the market. The test also shows that this path is positive, but the finding is not significant. For the third and final hypothesis I predicted a negative effect of turnover of employees on market orientation competitiveness. This is argued on the basis that the employees will need time for socialization before they can be part of existing procedures. The test, however, shows significant positive direction. To explain this, it can be that market-oriented businesses are so dynamic in their behavior that they also develop the ability to integrate new employees into roles in a faster time than the non-market-oriented competitors can. This is, however, only speculation and the relationship should be investigated more in depth in future studies.

Hypothesis: Effects from turnover			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	+	NS
Market orientation scope	+	+	NS
Market orientation competitiveness	-	+	P < .10

Product superiority. The dependent variable, product superiority, is consistent with business leader's effort to design profitable products. The knowledge that was developed by the market orientation learning process explained 37 percent of the change in product superiority, a noteworthy number. The reason that the market-oriented companies increased companies' ability to develop superior products was assessed through three dynamic learning capabilities which the market-oriented companies developed. This was an increased ability to perform the intelligence activities themselves, which meant that that the processing of the intelligence was more efficient so that the business could generate more

knowledge than its competitors with the same or less use of resources. Second, they increased their ability to invest in new markets without increasing the risk of failure. This was because of the increased and improved ability to detect new and relevant sources for information for decision support. Thirdly, the entire market orientation process was stimulated by the support of tacit knowledge, which means that other competing companies can not easily duplicate or replace market orientation. This latter has a negative effect on product superiority, which means that the cost of tacitness is visible on the products in the market.

Hypothesis: Factors that affects product superiority			
Construct:	**Hypothesis**	**Findings**	**Level of significance**
Market orientation efficiency	+	+	P < .10
Market orientation scope	+	+	P < .10
Market orientation competitiveness	-	-	P < .05

7.2 Conclusion

The answer to the research question in this study is that those factors who affect market-oriented companies' generation of knowledge is shared vision, shared market orientation vision, open mind, knowledge level, marked based incentives, and employee turnover.

The study builds on the phenomenon of knowledge and intelligence at the organizational level, and to explain this, the study has drawn its logic from different sources of organizational learning theory, market orientation, strategy, and organizational theories. This theoretical foundation to the issue means one has been able to bring additional understanding to phenomenon by building on well established theories and research.

The research question was complementary to the existing market orientation literature, as this literature so far had its main focus concentrated on identifying causes that promotes the market orientation activity implementation (Jaworski and Kohli 1993, Selnes, Jaworski and Kohli 1996, Sinkula, Baker and Nordewier 1997). Thus, the study has increased the understanding of the causes to market orientation by regards to market orientation as learning entity.

Also the literature within organizational learning has been extended into new areas by applying the micro-processes in organizational learning theories in conjunction with the market orientation literature. The basis for the understanding of knowledge generation was a three-part process in which the desire to learn impact the knowledge processes, which in turn influence the behavioral processes.

While the learning processing within the market orientation activities have been treated as implicit given in the former market orientation literature, this study has demonstrated that the learning process within market orientation can both be stimulated and obstacle. For example the study show that shared vision reduces the market orientation scope. An open mind increases market orientation efficiency and scope, while it simultaneously reduces the company's market orientation competitiveness. The same happens to the knowledge level. It increases the market orientation scope, while it decreases the market orientation competitiveness. Turnover, however, has only a positive effect on market orientation scope, in the same way as shared marked orientation visions.

The explained variance showed that the research model has rather large impact on the learning orientation within market orientation. Therefore, the exogenous factors should be taken seriously when one seeks to exploit the learning *within* the market oriented companies.

7.3 Managerial implications

The study has several practical implications regarding management decisions. Since the purpose of the study has been to identify the learning process within market-oriented businesses, the empirical findings that have identified drives will guide managers in how to promote or reduce obstacles for the learning processes within the company. The managers thereby have a tool that can help them to create a business that generates a higher degree of knowledge of how to utilize the market data within the company.

Market orientation efficiency

Market orientation efficiency is about company's ability to learn how to perform the intelligence activities. Market orientation efficiency positively affects a company's ability to create superior products. Therefore, it is important to facilitate the organization's market orientation efficiency, and this study identified two factors affected this market orientation efficiency. This was a strong and positive effect from an open mind, in addition to marked based incentives. Therefore, to increase a company's capability to perform and learn how to perform the market orientation activities, the managers should build a company that emphasis an open mind. This is done by facilitate employees new way of thinking, and letting them know that critical thinking are important, and make sure that the employee continually questioning how they perceives the market place. The managers should also build incentive systems that favors customer satisfaction and rewards the relationship which the employee builds toward the customers.

	Market orientation efficiency
Open mind	+
Market based incentives	+
Product superiority	+

Market orientation scope

Market orientation scope is found to positively affect the company's development of superior products, and the study showed that four value factors facilitated the organizations scope of market orientation. First, shared visions were found to negatively affect market orientation scope. This means that organizations that focus their learning within a particular scope loose their ability to think 'outside the box'. The positive effect from shared market orientation visions demonstrates this, by showing that these organizations particularly develop their ability to detect and exploit market opportunities. Also, the organizations open mind and knowledge level was found to positively affect the market orientation scope. Therefore, the absorptive capacity within the organization affects the level of interpretation, and managers should therefore encourage learning and formal training.

	Market orientation scope
Shared visions	-
Shared market orientation visions	+
Open mind	+
Knowledge level	+
Product superiority	+

Market orientation competitiveness

While market orientation competitiveness is important for protecting the market orientation learning toward competitors' imitations and replications, it has its price in that it decreases the company's ability to develop superior products. This is because the competitiveness is captured by the tacitness in the market orientation processing, and this tacitness do not favor the outcome from the production process within the organization. The analysis shows that it is challenging to build tacit knowledge within an organization. As expected, an open mind reduces the market orientation competitiveness. This is because an open mind favors new thinking, while the competitiveness is about tacit routines. Also formal knowledge level within the organization decreases the level of tacit knowledge. Therefore, the organizations will face a tradeoff; they have to increase the market orientation efficiency and scope at the cost of the competitiveness within market orientation. As a matter of fact, the only factor that positively affected market orientation competitiveness were employee turnover, which were opposite of the hypotheses relationship. One explanation could be that it is even more important to build tacit routines for organizations that have a high degree of turnover. This is because their can not lean on the formal procedures.

	Market orientation competitiveness
Open mind	-
Knowledge level	-
Turnover	+
Product superiority	-

In *summary*, the study has reached a number of value factors that help to generate more knowledge out of data than companies that are not market-oriented are able to. Thus one has started a small step in the development of a

management tool that provides both the arguments for and ways of implementing market orientation. Moreover, capability measures on market orientation are on to argue when a company should focus on market orientation and when it should not do this. This is because the companies that supply more resources to process than the value of the knowledge they get out have carried out an uneconomic investment. Moreover, giving the task referred to the ability to improve the process so that investment can be profitable.

7.4 Limitations and future research

This section will explain the methodological limitations of the study and give suggestions for future research.

Research design

This study is based on detecting causality between endogenous and exogenous variables by means of a cross-sectional study. The three criteria for causality are isolation, covariation and temporal ordering. The criteria for isolation are considered the 'least' important in theory development, as isolation and covariance are established before the impact of the relationships can be established. Thus the danger of spurious, masked, or reciprocal connections is secured through the theoretical support for causality. The study has demonstrated how the explanatory power varies depending on the market orientation perspectives. This study therefore is one of the first studies that look explicitly at the factors that promote the learning process of market orientation. The exogenous variables explained between 30 - 50% variance in market orientation capabilities. Future studies should, however, replicate and extend the research model to further validate the findings. For example, future research should investigate types, levels, and means to develop knowledge though training and competence development within the organizations.

Data collection

Data is collected from key informants from the companies that are represented in the sample. To use managers as key informants is confirmed positive in several studies, despite some bias between the informant's perceptions and facts (Dess and Robinson 1984; Sandvik and Grønhaug 1998). However, it would be interesting if future studies tested the perceptions of shared values and open mind from the employee's point of view, and the level of market orientation and product superiority from the customer's point of view. Also, use of multiple informants in order to highlight the consistency in the influence and effect on causal model is preferable.

Measurement

Some of the indicators that were developed for the research model need further development. This particularly applies to turnover of employees and market orientation scope. Some of the indicators have thus been used despite low reliability. The indicators have been captured from existing literature and adapted to secure face validity. However, some of the indicators hardly satisfy convergent and divergent validity, partly because they have not been used in this context before. In this way, this project was a pilot project on the use of indicators in new areas.

References

Adams, Marjorie E., George S. Day and Deborah Dougherty (1998). "Enhancing New Product Development Performance: An Organizational Learning Perspective." *Journal of Product Innovation Management* 15: 403-422.

Agyris, Chris and Donald A. Schön (1978). *Organizational Learning: A Theory of Action Perspective*, Reading, MA: Addison-Wesley.

Anderson, James C. and David W. Gerbing (1988). "Structural Equation Modeling in Practice: A Review and Recommended Two- Step Approach." *Psychological Bullentin* 103 (3): 411-423.

Atuahene-Gima, Kwaku (1996). "Market Orientation and Innovation." *Journal of Business Research* 35: 93-103.

Atuahene-Gima, Kwaku (1995). "An Exploratory Analysis of the Impact of Market Orientation on New Product Performance, A Contingency Approach." *Journal of Product Innovation Management* 12: 275-293.

Bagozzi, Richard P. (1994). Measurement in Marketing Research: Basic Principles of Questionnaire Design. *Principles of Marketing Research*. R. P. Bagozzi. Cambridge, MA, Blackwell Publishers**:** 1-50.

Bagozzi, Richard P. and Youjaw Yi (1988). "On the Evaluation of Structural Equation Models." *Journal of the Academy of Marketing Science* 16 (1): 74-94.

Barney, Jay B. (1991). "Firm Resources and Sustained Competitive Advantage." *Journal of Management* 17 (1): 99-120.

Barney, J. B. (1994). Bringing managers back in: a resource-based analysis of the role of managers in creating and sustaining competitive advantage. In J.B. Barney, J.C. Spender & T. Reve (Eds.), D*oes management matter? On competencies and competitive advantage*. Lund: Institute of Economic Research

Berry, William R (1993). *Understanding Regression Analysis*. Newbury Park, California, Sage Publications, Inc.

Bollen, Kenneth A. (1989). *Structural Equations with Latent Variables*. New York, John Wiley & Sons.

Bollen, K.A. and R. Lennox (1991). "Conventional Wisdom on Measurement: A Structural Equation Perspective." *Psychological Bulletin* 110 (2): 305-314.

Browne, M. W. and R Cudeck (1993). Alternative Ways of Assessing Model Fit. *Testing Structural Models*. K. A. L. Bollen, J. S. London, Sage**:** 136-162.

Churchill, Gilbert A, Jr. (1979). "A Paradigm for Better Measures of Marketing Constructs." *Journal of Marketing Research* XVI (February): 64-73.

Cohen, Wesley M and Daniel A Levinthal (1990). "Absorptive Capacity: A New Perspective on Learning and Innovation." *Administrative Science Quarterly* XVI (February).

Cook, Thomas D. and Donald T. Campbell (1979). *Quasi-Experimentation, Design & Analysis Issues for Field Settings*. Boston, Houghton Mifflin.

Cooper, Robert G. (1994). "New Products: The Factors that Drive Success." *International Marketing Review* 11 (1): 60-76.

Cravens, David W., Gordon Greenley, Nigel F. Piercy and Stanley F. Slater (1998). "Mapping the Path to Market Leadership." *Marketing Management* (Fall): 29-39.

Cyert, Richard M. and James G. March (1963). *A Behavioral Theory of the Firm*. Englewood Cliffs, N.J.

Daft, Richard L. and George P. Huber (1987). "How organizations learn: A communication framework." *Research in the Sociology of Organizations* 5: 1-36.

Daft, Richard L. and Karl E. Weick (1984). "Toward a Model of Organizations as Interpretation Systems." *Academy of Management Review* 9 (2): 284-295.

Davis, Peter S. and Patrick L. Schul (1993). “Addressing the Contingent Effects of Business Unit Strategic Orientation on Relationships Between Organizational Context and Business Unit Performance.” *Journal of Business Research* 27/3 (Jul): 183-200.

Day, Georg S. (1991). Learning About Markets. Cambridge, Massachusetts, Market Science Institute. Volume.

Day, George S. (1994a). “Continuous Learning About Markets.” *California Management Review* Summer: 9-31.

Day, George S. (1994b). “The Capabilities of Market-Driven Organizations.” *Journal of Marketing* 58 (October): 37-52.

Day, George S. and Prakash Nedungadi (1994). “Managerial Representations of Competitive Advantage.” *Journal of Marketing* 58 (April): 31-44.

Day, George S. and Robin Wensley (1988). “Assessing Advantage: A Framework for Diagnosing Competitive Superiority.” *Journal of Marketing* 5: 265-273.

DeGus, Arie P. (1988). “Planning as Learning.” *Harvard Business Review* 66 (March-April): 70-74.

Deshpandé, Rohit and John U. Farley (1996). Understanding Market Orientation: A Prospectively Designed Meta-analysis of Three Market Orientation Scales, *Marketing Science Institute*.

Deshpandé, Rohit, and John U. Farley (2004). "Organizational Culture, Market Orientation, Innovativeness and Firm Performance: An International Research Odyssey." *International Journal of Research in Marketing*, 21: 3-22.

Deshpandé, Rohit, John U. Farley and Frederick E. Jr. Webster (1993). “Corporate Culture, Customer Orientation, and Innovativeness in Japanese Firms: A Quadrad Analysis.” *Journal of Marketing* 57 (January): 23-37.

Deshpandé, Rohit and Frederick E. Webster (1989). “Organizational Culture and Marketing: Defining the Research Agenda.” *Journal of Marketing* 53 (January): 3-15.

Dess, Gregory D. and Richard B. Robinson (1984). “Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit.” *Strategic Management Journal* 5 (3): 265-273.

Dickson, Peter Reid (1992). “Toward a General Theory of Competitive Rationality.” *Journal of Marketing* 56 (January): 69-83.

Drucker, Peter (1954).*The Practice of Management*. New York, Harper and Row.

Galer, Graham and Kees van der Heijden (1992). “The Learning Organization: How Planners Create Organizational Learning.” *Market Intelligence & Planning* 10 (6): 5-12.

Gebhardt, Gary F., Gregory S. Carpenter and John F. Sherry, Jr. (2006), “Creating a Market Orientation: A Longitudinal, Multi-Firm, Grounded Analysis of Cultural Transformation,” *Journal of Marketing*, October 2006, 70, 4; 37-54.

Garvin, David A. (1993). “Building a Learning Organization.” *Harvard Business Review* 71: 78-91.

Grant, Robert M. (1996). “Toward a knowledge-based theory of the firm.” *Strategic Management Journal* 17 (Winter Special Issue): 109-122.

Greenley, Gordon E. (1995). “Market Orientation and Company Performance: Empirical Evidence from UK Companies.” *British Journal of Management* 6: 1-13.

Grinstein, A. (2008), "The effect of market orientation and its components on innovation consequences: a meta-analysis", *Journal of Academy of Marketing Science*, 36, 2: 166-73.

Hair, jr. Joseph F., Rolph E. Anderson, Ronald L. Tatham and William C. Black (1995). *Multivariate Data Analysis with Readings*. New Jersey, Prentice Hall International.

Han, Jin K., Namwoon Kim and Rajendra K. Srivastava (1998). "Market Orientation and Organizational Performance: Is Innovation a Missing Link?" *Journal of Marketing* 62 (October): 30-45.

Harris, Lloyd C. (1999). "Barriers to Developing Market Orientation." *Journal of Applied Management Studies* 8 (1): 85-101.

Harris, Lloyd C. and Emmanuel Ogbonna (1999). "Developing a Market Oriented Culture: A Critical Evaluation." *Journal of Management Studies* 36 (March 2): 177-196.

Hedberg, Bo (1981). How organizations learn and unlearn. *Handbook of organizational design*. Oxford, Oxford University Press**:** 3-28.

Hofer, Charles W. and Dan E. Schendel (1978).*Strategy Formulation: Analytical Concepts*. Minneapolis, West Publishing.

Horng, Shun-Ching (1998). "Market Orientation of Small and Medium-Sized Firms in Taiwan." *Journal of Small Business Management* (July): 79-85.

Huber, George P. (1991). "Organizational Learning: The Contributing Process and the Literatures." *Organization Science* 2 (1): 88-115.

Hult, G. Thomas and O.C. Ferrell (1997). "A Global Learning Organization Structure and Market Information Processing." *Journal of Business Research* 40: 155-166.

Hunt, Shelby D. (1991).*Modern Marketing Theory: Critical Issues in the Philosophy of Marketing Science*. Cincinnati, OH, South-Western Publishing Co.

Hunt, Shelby D. (1993). "Objectivity in Marketing Theory and Research." *Journal of Marketing* 57 (April).

Hunt, Shelby D and Robert M Morgan (1995). "The Comparative Advantage Theory of Competition." *Journal of Marketing* 59 (April).

Hurley, Robert F. and Thomas G. Hult (1998). “Innovation, Market Orientation, and Organizational Learning: An Integration and Empirical Examination.” *Journal of Marketing* 62 (July): 42-54.

Isabella, Lynn A. (1990). “Evolving interpretations as a change unfolds: how managers constue key organizational events.” *Academy of Management Journal* 33 (1): 7-41.

Jablin, Fredric M. (1984). Assimilating New Members into Organizations. *Organizational Communication*. Newbury Park, California, Communication Association**:** 594-626.

Jaworski, Bernhard J and Ajay K Kohli (1993). “Market Orientation: Antecedents and Consequences.” *Journal of Marketing* 57 (July): 53-70.

Jöreskog, Karl G. and Dag Sörbom (1982). “Recent Developments in Structural Equation modeling.” *Journal of Marketing Research* 19 (November): 404-416.

Kamoche, Ken and Frank Mueller (1998). “Human Resource Management and the Appropriation-Learning Perspective.” *Human Relations* 51 (8): 1033-1060.

Kelley, Scott W. (1992). “Developing customer orientation among service employees.” *Journal of the Academy of Marketing Science* 20 (1): 27-36.

Kogut, Bruce and Udo Zander (1992). “Knowledge of the firm, combinative capabilities, and the replication of technology.” *Organization Science* 3 (3, August): 383-397.

Kogut, Bruce and Udo Zander (1996). “What Firms Do? Coordination, Identity, and Learning.” *Organization Science* 7 (5, September-October): 502-518.

Kohli, Ajay K. and Bernard J. Jaworski (1990). “Market Orientation: The Construct, Research Propositions, and Managerial Implications.” *Journal of Marketing* 54 (April): 1-18.

Kohli, Ajay K., Bernard J. Jaworski and Ajith Kumar (1993). “MARKOR: A Measure of Market Orientation.” *Journal of Marketing Research* XXX (November): 467-477.

Kyriakopoulos, Kyriakos and Christine Moorman (2004), “Tradeoffs in Marketing Exploitation and Exploration Strategies: The Overlooked Role of Market Orientation,” *International Journal of Research in Marketing*, 21 (September), 219-240.

Lant, Theresa K., Frances J. Milliken and Bipin Batra (1992). “The role of managerial learning and interpretation in strategic persistence and reorientation: an empirical exploration.” *Strategic Management Journal* 13: 585-608.

Lei, David, John W. Slocu and Robert A. Pritts (1999). “Designing Organizations for Competitive Advantage: The power of Unlearning and Learning.” *Organizational Dynamics* (Winter): 24-38.

Levinthal, Daniel A. (1992). Organizational Adaption and Environmental Selection: Interrelated Processes of Change. *Organizational Learning*. Thousand Oaks, California, Sage Publications, Inc.**:** 195-202.

Levinthal, Daniel A. and James G. March (1993). “The Myopia of Learning.” *Strategic Management Journal* 14: 95-112.

Levitt, Barbara and James G. March (1988). “Organizational learning.” *Annual Reviews of Sociology* 14 (319-340).

Li, Tiger and Roger J. Calantone (1998). “The Impact of Market Knowledge Competence on New Product Advantage: Conceptualization and Empirical Examination.” *Journal of Marketing* 62 (October): 13-29.

March, James G. (1991). “Exploration and Exploitation in Organizational Learning.” *Organization Science* 2 (1February): 71-87.

McCelland, David C. (1985). “How Motives, Skills, and Values Determine What People Do.” *American Psychologist* 40 (July): 812-825.

McGill, Michael E. and John W. Jr. Slocum (1993). “Unlearning the Organization.” *Organizational Dynamics* 22 (Autumn 2): 67-79.

McKee, Daryl (1992). “An Organizational Learning Approach to Product Innovation.” *Journal of Product Innovation Management* 9: 232-245.

Menguc, B. and Auh, S. (2006). “Creating a Firm-Level Dynamic Capability

through Capitalizing on Market Orientation and Innovativeness", *Journal of the Academy of Marketing Science*. 34, 1.

Meziou, Fekri (1991). "Areas of Strength and Weakness in the Adoption of the Marketing Consept by Small Manufacturing Firms." *Journal of Small Business Management* (October): 72-79.

Miles, R. E. and C. C. Snow (1978).*Organizational Strategy, Structure and Process*. New York.

Moorman, Christine (1995). "Organizational Market Information Processes: Cultural Antecedents and New Products Outcomes." *Journal of Marketing Research* XXXII (August): 318-335.

Moorman, Christine and Anne S. Miner (1997). "The Impact of Organizational Memory on New Product Performance and Creativity." *Journal of Marketing Research* (February): 91-106.

Robert E. Morgan and Pierre Berthon (2008). "Market Orientation, Generative Learning, Innovation Strategy and Business Performance Inter-Relationships in Bioscience Firms," *Journal of Management Studies*, Blackwell Publishing, vol. 45 (8): 1329-1353.

Morgan, Robert E., Constantine S. Katsikeas and Kwaku Appiah-Adu (1998). "Market Orientation and Organizational Learning Capabilities." *Journal of Marketing Management* 14: 353-381.

Narver, John C. and Stanley F. Slater (1990). "The Effect of a Market Orientation on Business Profitability." *Journal of Marketing* 54 (October): 20-35.

Neil A. Morgan, Douglas W. Vorhies and Charlotte H. Mason (2009), Market orientation, marketing capabilities, and firm performance, *Strategic Management Journal*, 30, 8, 909 – 920.

Nelson, Richard R. (1991). "Why do firms differ, and how does it matter?" *Strategic Management Journal* 12: 61-74.

Normann, Richard (1985). Developing Capabilities for Organizational Learning. *Organizational Strategy and Change: New Views on Formulationg and*

Implementing Strategic Decisions. San Francisco, California, Jossey-Brass Inc. Publishers**:** 217-248.

Olsson, Ulf H., Tron Foss, Sigurd V. Troye and Roy D. Howell (1999). "The Performance of Maximum Likelihood, Generalized Least Squares and Weighted Least Squares Estimation in Structural Equation Modeling under conditions of misspecification and nonnormality." *In press*.

Olsson, Ulf H., Sigurd V. Troye and Roy D. Howell (1999). "Theoretic Fit and Empirical Fit: The Performance of Maximum Likelihood versus Generalized Least Squares Estimation in Structural Equation Models." *Multivariate Behavioral Research* 34 (1): 31-59.

Pelham, Alfred M. (1999). "Influence of Environment, Strategy, and Market Orientation on Performance in Small Manufacturing Firms." *Journal of Business Research* 45: 33-46.

Powpaka, Samart (1998). "Factors Affecting the Adoption of Market Orientation: The Case of Thailand." *Journal of International Marketing* 6 (1 Spring): 33-55.

Ruekert, Robert W. (1992). "Developing a market orientation: an organizational strategy perspective." *International Journal of Research in Marketing* 9 (3): 225-245.

Sandvik, Kåre (1998). "The Effects of Market Orientation." Unpublished Doctoral Dissertation, *Norwegian School of Business and Economic Administration.*

Sandvik, Kåre and Kjell Grønhaug (1998). *How Well Does the Company Know Its Customers? The Moderating Effect of Market Orientation.* AMA Winter Conference, American Marketing Association.

Schwartz, Horward and Stanley M. Davis (1981). "Matching Corporate Culture and Business Strategy." *Organizational Dynamics* 10 (Summer).

Selnes, Fred, Bernard J. Jaworski and Ajay K. Kohli (1996). "Market Orientation in United States and Scandinavian Companies. A Cross-cultural Study." *Scandinavian Journal of Management* 12 (2): 139-157.

Senge, Peter M (1990).*The Fifth Discipline: The Art and Practice of the Learning Organization*. New York, Doubleday.

Shapiro, Benson P. (1988). "What the Hell is Market Oriented." *Harvard Business Review* (Nov-Des): 119-127.

Shaw, Robert Bruce and Perkins Dennis N. T (1991). "Teaching organizations to learn." *Organization Development Journal* 9 (4): 1-13.

Siguaw, Judy A., Penny M. Simpson and Thomas L. Baker (1998). "Effects of Supplier Market Orientation on Distributor Market Orientation and the Channel Relationship: The Distributor Perspective." *Journal of Marketing* 62 (July): 99-111.

Simon, Herbert A. (1991). "Bounded Rationality and Organizational Learning." *Organization Science* 2 (1): 125-134.

Singh, Jagdip (1991). "Redundancy in Constructs: Problem, Assessment, and an Illustrative Example." *Journal of Business Research* 22: 255-280.

Sinkula, James M. (1994). "Market Information Processing and Organizational Learning." *Journal of Marketing* 58 (January): 35-45.

Sinkula, James M., William E. Barker and Thomas Nordewier (1997). "A Framework for Market-Based Organizational Learning: Linking Values, Knowledge, and Behavior." *Journal of the Academy of Marketing Science* 25 (4): 305-318.

Sitkin, Sim B. (1996). Learning Through Failure. *Organizational Learning*. M. D. Cohen and L. S. Sproull. Thousand Oaks, California, Sage**:** 541-602.

Silkoset, Ragnhild (2009). *Co-market Orientation in Networks*. VDM-publishing, Germany.

Slater, Stanley F and John C Narver (1994). "Does Competitive Environment Moderate the Market-Orientation-Performance Relationship ?" *Journal of Marketing* 58 (January).

Slater, Stanley F. and John C. Narver (1995). "Market Orientation and the Learning Organization." *Journal of Marketing* 59 (July): 63-74.

Srivastava, Rajendra K., Tasadduq A- Shervani and Liam Fahey (1998). "Market-Based Assets and Shareholder Value: A Framework for Analysis." *Journal of Marketing* 62 (January): 2-18.

Teece, David J., Gary Pisano and Amy Shuen (1990). Firm Capabilities, Resources and the Concept of Strategy, EAP.

Teece, David J., Gary Pisano and Amy Shuen (1997). "Dynamic Capabilities and Strategic Management." *Strategic Management Journal* 18 (7): 509-533.

Tobin, Daniel R. (1993).*Re-Educating the Corporation: Foundations for the Learning Organization*. Essex.

Troye, Sigurd (1994).*Teori- and forskningsevaluering: Et kritisk realistisk perspektiv*. Oslo, TANO A.S.

Van Engeren, Marcha and Stephen O'Connor (1998). "Drivers of market orientation and performance in service firms." *Journal of Service Marketing* 12 (1): 39-58.

Varadarajan, P. Rajan and Satish Jayachandran (1999). "Marketing Strategy: An Assessment of the State of the Field and Outlook." *Journal of the Academy of Marketing Science* 27 (Spring 2): 120-143.

Venkatraman, N. (1989). "Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement." *Management Science* 35 (8): 942-962.

Webster, Frederick E. Jr. (1988). "Rediscovering the Marketing Concept." *Buziness Horizons* 31 (May-June): 29-39.

Weick, Karl E. (1976). "Educational Organizations as Loosely Coupled Systems." *Administrative Science Quarterly* 21 (March): 1-19.

Wrenn, Bruce (1997). "The Market Orientation Construct: Measurement and Scaling Issues." *Journal of Marketing, Theory and Practice* (Summer): 31-54.

Zaltman, Gerald, Christian R.A Pinson and Reinhard Angelmar (1973). *Metatheory and Consumer Research*. New York, Holt, Rinehart and Winston.

Zander, Udo and Bruce Kogut (1995). "Knowledge and the Speed of the Transfer and Imitation or Organizational Capabilities: An Empirical Test." *Organization Science* 6 (1): 76-92.

Zeithaml, Valarie A. (1988). "Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence." *Journal of Marketing* 52 (July): 2-22.

Zhou, K.Z., J.J. Li, N. Zhou, and C. Su (2008), "Market Orientation, Job Satisfaction, Product Quality, and Firm Performance: Evidence from China," *Strategic Management Journal*, 29 (9): 985-1000.